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THE

VETERINARY JOURNAL.

EDITED BY

PRINCIPAL W. OWEN WILLIAMS, F.R.C.V.S., F.R.S.E.

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I am, Gentlemen, faithfully yours,

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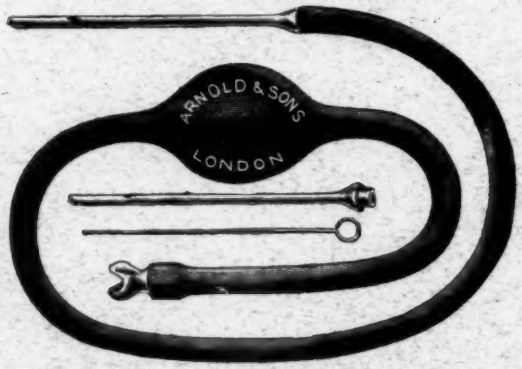

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THE

VETERINARY JOURNAL

JULY 1901.

Editorial.

THE INDIAN SERVICE.

OUR readers will find below the regulations for the Indian Civil Veterinary Department, together with a letter from the Secretary of the Revenue Department of the India Office. We print these knowing that the matter is one which will greatly interest our readers, directly or indirectly. We are ever on the outlook for openings that may give vent to the overflowing energy of the profession, and we look upon this branch of the service as an important one for our capable young men. We venture at the same time to criticise the regulations, and trust that the Government will not take our remarks amiss. On the contrary, we feel sure that those in high places will not disdain the respectful criticisms which we offer as experts, but will allow them their due weight.

REGULATIONS FOR INDIAN CIVIL VETERINARY DEPARTMENT.

"1. The officers of the Indian Civil Veterinary Department perform or supervise all official veterinary work in India, other than that of the Army, and are debarred from private professional practice in India. Their duties may be divided into three classes, under the following heads:—

"(*a*) Educational work, in veterinary colleges;
"(*b*) Horse and mule breeding;
"(*c*) Cattle disease and cattle breeding."

This is something like a slight to the Civil Veterinary Department as compared with other branches. The Medical Service are not debarred, nor are the A.V.D.—in fact, in the Indian Medical Service private practice is looked on as one of the attractions, and is the chief reason why such good men enter it. Public Works, Engineers, and the Geological Department are not debarred, nor is the Government Botanist. Let the Indian Government say that certain persons are entitled to veterinary attendance in the same way as they are entitled to medical. If debarred from private practice, the V.S. will be in an intolerable position—he either must refuse to look at anything,

or else his life will be a burden to him. In India the residents expect to pay for veterinary attendance.

"2. Appointments to this Department are made, as vacancies occur, by the Secretary of State for India, and applications regarding them should be addressed to the Revenue Secretary, India Office, London, S.W."

This method of appointment opens the door for all sorts of irregularities. There should be a nomination of suitable candidates, and then a competitive examination, as in the Indian Medical Service, when a vacancy occurs. By the proposed method the Indian C.V.D. would tend to become a haven of refuge for the *protégés* of high Indian officials.

"3. Candidates must not (except on special grounds to be approved by the Secretary of State) be over twenty-six years of age, and must possess a diploma from the Royal College of Veterinary Surgeons. Evidence of a knowledge of bacteriology, and of capacity for carrying out original research, will be specially taken into account in estimating the claims of candidates. Good health, a sound constitution, and active habits are essential, and candidates must be certified by the Medical Board of the India Office to be physically fit for service in India."

The age is too low. For the A.V.D. it is twenty-seven, with discretionary powers to the Secretary of State for War to increase it. We think thirty should be the limit. The Indian Government would get more experienced men at that age.

"4. On appointment a free first-class passage to India will be granted, subject to the condition that its cost shall be refunded in the event of an officer resigning the service, on grounds other than certified ill-health, within five years from the date of his arrival in India."

"5. Pay will be as follows:—On arrival in India Rs. 500 a month, rising by Rs. 40 each year to Rs. 1100, which rate will continue from the beginning of the 16th to the end of the 20th year of service; after the beginning of the 21st year Rs. 1200 a month. The pay of the Inspector-General, the administrative head of the Department, will be Rs. 1800 a month.

"Extra allowances of Rs. 80 to 100 a month are attached to certain appointments, and house rent is allowed in certain cases.

"6. Appointments will be made on probation for five years, and subject to such rules as the Government of India may lay down in regard to qualification in the native languages."

The period of probation, five years, is much too long, and makes the life an uncertainty. A year or eighteen months would be sufficient. If a knowledge of native languages is required, strict rules as to study and examination should be insisted upon.

"7. Officers who, after satisfactory completion of the period of probation, remain in the service of the Government of India, will become entitled to the benefit of the Leave and Pension Rules for European officers contained in the Indian Civil Service Regulations (regarding which information can be obtained from the Revenue Secretary, India Office, London, S.W.), and will reckon service for leave and pension from the date of arrival in India on first appointment. Retirement is obligatory at 55 years of age.

"The Inspector-General will be eligible for the extra pension of Rs. 1000 per annum admissible to an officer after at least three years' approved service as head of a department, if considered deserving of the special concession."

The clause "if considered deserving of the special concession" might be eliminated altogether, for if the officer is considered good enough to be retained as Inspector-General for three years, he is good enough for the special concession.

"8. Each officer will be required, before leaving this country, to enter into an agreement with the Secretary of State for India embodying the conditions of his appointment."

INDIA OFFICE, *June* 1901.

"INDIA OFFICE, WHITEHALL,
LONDON, S.W., *14th June* 1901.

"SIR—In reply to your letter of the 13th June I am directed to inform you that under the rules for the time being in force on the subject of exchange compensation allowance, officers of the Civil Veterinary Department in India are eligible for that allowance.

"The regulations forwarded to you may be published in the VETERINARY JOURNAL.—I am, Sir, your obedient servant,

T. W. HOLDERNESS,
Secretary, Revenue and Statistics Department.

"THE PRINCIPAL,
NEW VETERINARY COLLEGE, EDINBURGH."

Royal College of Veterinary Surgeons.

THE Fifty-Eighth Annual Meeting of the Royal College of Veterinary Surgeons was held at the College, 10 Red Lion Square, W.C., on Wednesday, June 5th, 1901. A. C. Cope, Esq., President, occupying the Chair. The following were present:—General Sir Frederick FitzWygram, Vet.-Col. Duck, Vet.-Col. Lambert; Professors M'Fadyean and Pritchard; Messrs. J. Abson, G. A. Banham, S. Bennett, John Blakeway, J. H. Carter, R. W. Clarke, W. R. Clarke, H. J. Dawes, Henry Gray, Wright Graves, F. L. Gooch, Wm. Hunting, E. R. Harding, J. S. Hurndall, A. H. Jacobs, A. A. Johnson, Lawson, Levie, H. Lomas, James MacArthur, Hugh A. MacCormack, G. D. Martin, Mason, Mulvey, A. J. Owles, H. L. Roberts, J. Rowe, Wm. Shipley, S. Slocock, C. A. Squair, J. A. Todd, S. Villar, F. Walpole, J. Ward, J. Wartnaby, A. L. Wilson, F. W. Wragg, Mr. Thatcher (Solicitor), and Mr. A. W. Hill (Secretary.)

The SECRETARY read the notice convening the meeting published in *The London Gazette.*

On the motion of Mr. MULVEY, seconded by Mr. WARTNABY, the Minutes of the last Annual General Meeting were taken as read and approved.

The SECRETARY announced the result of the ballot for the election of new Members of Council.

XUM

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Elected.

Wragg, . . .	724	M'Call, . . .	587
Cope, . . .	666	Mulvey, . . .	587
Carter, . . .	643	M'Kinna, . .	561
Williams, . .	639	Mettam, . . .	561
Shipley, . . .	621	Shave, . . .	434

Not Elected.

Slocock, . . .	354	Clarke, . . .	258
Thompson, . .	343	Reekie, . . .	162
Gray, . . .	295	Irving, . . .	146
Meredith, . .	282		

The PRESIDENT declared these gentlemen duly elected Members of the Council.

The meeting then proceeded to ballot for two gentlemen to take the places of Professor Pritchard and Mr. Winter, who had retired from the Council.

On the ballot being taken Mr. A. C. Cope was elected in the place of Mr. Winter, and Professor Mettam in the place of Professor Pritchard.

On the motion of Mr. VILLAR, seconded by Mr. ABSON, a vote of thanks was accorded to the scrutineers for their services in examining the voting papers.

DISCUSSION ON THE ANNUAL REPORT.

Mr. LAWSON.—I beg to propose that the report be received.

Mr. CARTER seconded the motion.

Mr. VILLAR.—There is a matter of considerable interest, not only to the veterinary profession but to the outside public, to which I wish to allude. It is not specifically mentioned in the report, but as two paragraphs in the report bear on it, I think perhaps it is open for discussion now. The subject which I allude to is what for want of a better term I may call the present stagnation in the numbers of our profession. If you will refer to the report you will find that during the past year 78 gentlemen were admitted members of the profession, while later on in the report it is shown by the registrar that the number of deaths recorded during the year has been 74. As our Secretary has a difficulty sometimes in getting information of men who have died, I venture therefore to think we may take it that during the past year, the first year of the twentieth century, there has been no increase in the numbers of the veterinary profession. By our Charters and Acts of Parliament we have had granted to us a monopoly of the veterinary treatment of animals in this country, so that while we have great privileges we also incur certain duties. I think one of those duties is that we should supply at all events a number of members of our profession equal to the demands. It occurs to me that this is a question which all of us might seriously study in our spare moments—how it is that, seeing that nearly all the learned professions are overcrowded, our own veterinary profession is not increased even by a single member. What is the cause? It cannot be that the examinations are too stiff, because if we look at the paragraphs in the report referring to the examinations we find that nearly two-thirds of those who presented themselves passed the exami-

nations during the year. Therefore one can reasonably assume that the examinations are rather lenient than severe. A gentleman suggested to me some time ago that lately there has been great commercial activity, and that young men instead of entering the learned professions are going in for mercantile life, feeling that they have a more ready means of obtaining a fortune. Is that the reason? That there is a demand for veterinary surgeons I do not think any one can doubt, at the present time there being between forty and fifty vacancies in the Army Veterinary Department. You know as well as I do that quite recently a very large number of veterinary surgeons have been advertised for to proceed to our colonies and to take up duties in various parts of the world. I think this one of those questions which we ought to take up and think over—Whether it is not our duty to ourselves, to the profession, and to the general public to find out if we can the reasons of so few coming forward, and if possible endeavour to obtain suitable men as recruits to our profession.

Mr. WARD.—I quite agree with what Mr. Villar has said, because I have happened to have looked through some old reports and have noted down the figures. The fees received from examinations and registration in 1898 amounted to £2550; in 1899, to £2377; in 1900, to £2117; and in 1901, to £1935. The amount of fees received has fallen at least £200 every year. There is one thing I do not understand, namely, that last year there were 2000 odd examined and the examination fees amounted to £1300; this year only 1900 were examined, but the fees amounted to £1390. The examinations seem to decrease, but the examination fees seem to increase. There may be an explanation of it, but I do not understand it exactly. We seem to be getting as dry up in London as in the country; things do not progress. I notice that in the bank reserve in 1899 we had £400; in 1900, £300; and this year we have only £170. We seem to be going down hill altogether; we seem to be drying up in the source from which the bank is replenished. I wish to make a few remarks on the question of registration mentioned in the report. The crimes are there mentioned under two headings, the definite and indefinite. The definite seems to be that of advertising, and the indefinite seems to come under unprofessional conduct, which of course depends a great deal upon the opinion of the Committee and the fashion of the times. I quite agree with both of them, but at the same time I think the Committee ought to deal justly. Smith advertises that his medicines are good for "gripes" and "pip" or anything else, and he has his name removed from the register; but if a gentleman who is an examiner likes to try and get an extra shilling if he can by publishing and advertising his name as an examiner of the College, and a professor of such and such a College, and that he is at home for consultation on such and such hours, he is equally guilty as Smith is. I cut out this little advertisement intending to send it to the Editor of *The Veterinary Record* as he generally makes the members toe the line in a very pleasant way as well as the Council. Somehow or other I neglected to do it, but I should be very glad of your opinion as to whether it comes under the head of advertising or not.

Mr. MASON.—It has been before the Council.

Mr. ABSON.—These things should be forwarded to the Secretary, not to the journals.

Mr. WARD.—This is an advertisement of a member who advertises that he is an examiner of the Royal College of Veterinary Surgeons, a

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professor at the Royal College at Cirencester, and that he can be consulted on all veterinary matters.

Mr. TRIGGER.—That case was dealt with by the Registration Committee, and the member was dealt with just as any member of the profession would be dealt with. He was called upon to withdraw his notice like any other member of the profession, and he did so.

Mr. WARD.—I was not aware of that. To refer again to the report, I read,—"The Council have considered the applications for the restoration of names to the Register of persons who have been removed for various offences, and have acceded to them on evidence of good conduct in the meantime." I should like to know what is the time of probation allowed to members after they send in their application. Does it mean a year, or two years, or five years, "on evidence of good conduct in the meantime."

The PRESIDENT.—That depends upon the nature of the offence.

Mr. WARD.—I think the names of those persons who have been convicted of offences and who have been imprisoned ought not on any account again be reinstated on the Register.

The PRESIDENT.—I can assure you that the Council and the Committee take the greatest possible interest in all points of that kind, and consider them most carefully and justly. They do the best they can to look after the interests of the profession without doing any serious injury to the man unless it is absolutely necessary. You need not have any alarm on that subject.

Mr. WARD.—I quite agree that members who have been guilty of advertising, or what is considered unprofessional conduct, should be reinstated after a period of probation, but I do not think that members who have been guilty of crime should be allowed on the Register again under any consideration.

Mr. MULVEY.—They never have been.

Mr. WARD.—We are kept in the dark about the matter, because we do not know whose names are reinstated. We have the names given to us of those members who have died, but we do not know the resuscitated members. I do not see why the resuscitated names should not be given in the annual report as well as the deceased.

Mr. MULVEY.—You don't want to pillory a man more than is absolutely necessary.

Vet.-Col. LAMBERT.—With regard to Mr. Villar's remarks as to the number of gentlemen who have joined the profession during the past year, other professions have had the same experience as we have. The decrease in the numbers is due to the enlistment of young gentlemen in the Imperial Yeomanry and other corps for active service in South Africa.

Major OWLES.—I do not know whether it would be proper to allude to the great loss we have sustained by the recent death of a very eminent member of the profession, one who was well known in this room, and who did perhaps as much as any other member of the profession for its advancement and good, our late departed friend Dr. Fleming. I think it would be only right for us to allude to the sad calamity which the profession has sustained, and to remember an old and valued friend who has done so much and whose interest was so much centered in the profession. I should feel grieved if we took no notice of the departure of this eminent member of our profession, who sat in the chair more than once and did so much for the advancement of the profession.

The PRESIDENT.—The Council has already sent a vote of condolence to the wife of Dr. Fleming as representing the body corporate.

Major OWLES.—I was not aware of that, but still I think it would not be out of place if we made a note of it on the minutes of the annual meeting.

Mr. TRIGGER.—I should have pleasure in seconding the resolution if Major Owles will add the names of Professor Williams and Sir Henry Simpson. We must not be invidious in any case. I should have much pleasure in seconding a resolution that we place upon the minutes of this meeting the deep sense of the loss sustained by the profession in the deaths of Dr. Fleming, Professor Williams, and Sir Henry Simpson.

Major OWLES.—I shall be very pleased to accept that.

Mr. LAWSON.—I now beg to propose that the report be received and adopted, as the discussion is fairly well closed. Evidently the profession must be pretty well agreed as to what the Council has done during the last twelve months. The criticism on the report has not been very great, showing that the Council have done their work in a very efficient manner. I beg to propose the adoption.

Mr. GOOCH.—I have much pleasure in seconding the resolution. At the same time I think we shall have to look further afield than the suggestion thrown out by Colonel Lambert with regard to the decrease in the number of entrants into the veterinary profession. It has gone on for two or three years now. Personally, I think we must look to a pecuniary cause.

Major OWLES' resolution, "That the profession records its deep sense of the loss sustained by the profession in the deaths of Dr. Fleming, Professor Williams, and Sir Henry Simpson, and that the same be recorded on the minutes of the meeting," was put and carried unanimously.

The motion for the adoption of the report was then put and carried unanimously.

On the motion of Mr. CARTER, seconded by Major OWLES, a vote of thanks was accorded to the chairman for presiding.

SPECIAL GENERAL MEETING.

Mr. A. C. Cope, President, in the chair. The following members were present :—Messrs. Abson, Banham, Barrett, Bennett, Blakeway, Butters, Carter, Clarke, Dawes, Graves, Gray, Hall, Harding, Hobday, Johnson, Levie, Martin, Mason, Penberthy, Pollock, Pritchard, Rennie, Squair, Simpson, Shipley, Jun., Slocock, Trigger, Todd, Villar, Walpole, Woodroffe, Willett, Wooff, Wragg, Hill (Secretary), Thatcher (Solicitor).

The SECRETARY read the notice convening the meeting.

The PRESIDENT.—You have heard the notice of the meeting read. If any gentleman has any remarks to make I should be obliged if he would send me up his name on a piece of paper, and I will take you all in rotation as the papers come in.

Mr. W. ROGER CLARKE.—I rise, sir, to propose the first resolution, and I wish to glance at one or two phases of the aspect of the Council with regard to this case. In the first place, I wish just to call attention to this fact, which I gathered from some utterances of the Solicitor at the Council meeting, that when the informant first laid the particulars of the Cambridge case before the Registration Committee he was asked to saddle himself with all the responsibility and all the expenses of the prosecution, and that

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he successfully refused, saying that it was the duty of the College and not his duty to undertake the prosecution. This is the first point which I just wish to notice.

Now, then, we come after the investigation by the Registration Committee to the Council meeting at which the report of the Registration Committee was read. In the first place, I should like to read the section of the Veterinary Surgeons Act of 1881, which deals with these cases and which directs the conduct of the Council and committee. This is what it says: "The Council of the said Royal College shall, for the purpose of exercising in any case the power of removing a name from or of restoring a name to the Register of the Veterinary Surgeons, ascertain the facts of the case by a committee of the Council, the powers of the committee being exercisable by not fewer than three members of the committee, and a report of the committee, after hearing the person concerned, if he so desires, shall be for the purpose aforesaid conclusive as to the facts, but so that the Council shall form their own judgment on the case independently of any opinion of the committee." That seems, sir, clear enough that the committee's duty is to report conclusively on the facts and to supply the Council with a clear finding as to the facts, and that the Council has no business to interfere or to dispute the facts, but has to find whether those facts amount to unprofessional conduct or not, and also, if they do amount to unprofessional conduct, what course should be pursued. The committee do not seem to be debarred from expressing an opinion as to what should be done, but that is merely an opinion, but the reported facts by the committee is binding. I cannot see that the committee seem to have taken very great pains to inform the Council as to the facts of this case. All they seem to have done, as far as I can see from *The Veterinary Record*, is to state the formal charge, and merely state that they found it proved. The formal charge from *The Veterinary Record* was this: "That the member was guilty of conduct disgraceful in a professional respect, in stating to a livery stable keeper that he had glanders in his stable, and in manipulating two skulls to support that statement, knowing it to be untrue, for purposes of his own. It cannot be said that this conveys a very clear idea as to the facts. No one can make out very much with regard to this misty statement about manipulating two skulls, and the only clear fact in the report is that the defendant made a statement knowing it to be untrue. The first thing that happened in the Council meeting after the adoption of the report was moved and seconded was, that one fact in the report was attacked by Professor Penberthy. Professor Penberthy had not been present at the committee meeting, and he admitted himself to be altogether guided by the reporter's notes of the evidence. But he made some very damaging statements regarding the Registration Committee gathered altogether from the reporter's notes. My note is, he says, that the case was proved absolutely for and not against the defendant, and that there was not one tittle of evidence to show that the man had done anything disgraceful in a professional sense. He then proceeded to lay a version of facts before the Council, gathered presumably from this shorthand reporter's notes. Mr. Wragg objected to that course being taken, and to a member discussing the facts from the knowledge gained by the notes, but the objection was overruled by the then President. So Professor Penberthy proceeded to go on with this view of the case, and in answer to a question he said this: "I propose to state my view of the case. I do not admit, in the first place,

any opposite view of the case or an opposite side of the story." Presumably, we can assume that no opposite side of the story, according to Professor Penberthy, appeared in the shorthand reporter's notes. So he stated his version of the facts, which certainly wholly absolved the defendant from any such charge as the committee reported proved against him, and only left us to wonder why the committee should have found the case proved, especially as he asserted that in his view it came out by the evidence as clearly as it possibly could. Then, after first insinuating or suggesting a suspicion that the Registration Committee had decided on the case without ever discussing it, Professor Penberthy finally wound up his championship of the defendant by terrifying the Council, or attempting to terrify them, with the prospect of a successful appeal to the Privy Council. There are two things about this speech of Professor Penberthy's. The first was whether, as a contradiction of a fact contained in the report, it ever ought to be delivered, and the second is what it really meant to the Registration Committee who tried the case, and especially to the three members who convicted. It seems to me simply this, that those members brought up this man from Cambridge, subjected him to all the anxiety and to all the expense of a prosecution on one of the most serious charges that can be directed against a veterinary surgeon, and convicted him finally, and then were unable at the finish to show one tittle of evidence in support of the conviction.

I do not propose to spend much time on the discussion. I only wish to notice one question of Professor Edgar's. This is it: "May I ask how it is to be expected that this Council shall be able to form a judgment on such an important matter as this when the large majority of the Council are not cognisant of all the facts of the case." The then President, Mr. Simpson, then ruled that the report of the committee was to be accepted or rejected. There was a third course, which never seems to have occurred to any one, and that was, in the state of doubt which did exist, to refer the matter back to the Registration Committee to further report on it. That never seems to have occurred to any one. What seems to have happened is this. The majority of councilmen knew nothing about the facts admittedly from Professor Edgar's speech. They did not know that a man had been convicted of a very serious charge. They had just heard also the Registration Committee's efficiency very seriously impugned, and yet they simply refused to adopt the report without making any further attempt to get at the truth of the facts.

The next step in the case was the publication a few weeks afterwards in *The Veterinary Record* of an account, under the signature of Mr. Hunting, which was professedly an answer to and an attack on Professor Penberthy. It stated a lot of additional evidence not only for the prosecution, but also for the defence. The only thing I wish to say about it at present is that it placed an altogether different complexion on the case. Mr. Hunting, in a short leader in *The Record* on the same day, said that he stated the case with some hesitation and regret, his regret being that so clear a case had been made out for revision, and finally finished up his leader by saying that if the case was not gone into again by the Registration Committee, *we*—I do not know whether he meant the profession or whether he meant the editorial "we"—can only believe that a miscarriage of justice has taken place, and that some undiscovered reasons exist for a refusal to apply for a disciplinary punishment. Well, although the account put an altogether

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different complexion on the case, and although it contained a professional attack on Professor Penberthy, it remained altogether unnoticed, and the next real thing in the conduct of the Council is on October 10th, when a letter was read from Mr. Banham relating to this case. In this letter Mr. Banham complained of the Council discussing the case admittedly without a large number of the Council knowing the real facts of the case. He went on to say that, having heard the evidence for the defence, he was bound to hold that there was not an iota of evidence brought before the committee to justify them in arriving at any other conclusion than that of guilty, as they reported it, and he again went on to suggest that if the Council wished to ascertain the facts the witnesses themselves should give their evidence again before the whole Council. That sounded a fair enough expression of opinion that the conviction of the Council was wrong, and a fair enough desire that the Council should look into it. It was simply this. In the first place, the President, who was more than any other man bound to preserve impartiality between the Council and the profession, simply stated that the letter related to the Cambridge case, and put it to the members whether it was desirable that the letter should be read. It was moved and seconded that the letter should be read, and a short letter from Mr. Winter, then a member of Council, also expressing a desire that the case should be re-opened; then immediately after those letters were read I noticed that Professor Dewar asked if any of the members of the Council who came to an opposite decision had any remarks to make, and he was immediately met by cries of "No, no." Then Professor Dewar moved that the case should be re-opened, and in his speech I only wish to call your attention to one paragraph. I am quite certain that I can say, without fear of contradiction, that half of the members of Council did not know anything of the case when it was decided upon. This motion found no seconder, and it has been successfully opposed by Mr. Trigger in a speech which several members have torn to pieces since, and the final stage of the proceeding was that the President asked whether the reporter should take any notes of it. Luckily Mr. Trigger said that he did not mind, and if it had not been for Mr. Trigger it seems very probable that the whole letter and the discussion upon it would never have been known by the profession.

That is about all I wish to say, as far as we can go into the conduct of the Council, and I wish merely to propose a resolution which commits the meeting to an opinion that the matter has not gone far enough. The resolution is this: "That this meeting is of opinion that the action of the Council *re* the Cambridge case has been so unsatisfactory as to call for immediate explanation." Other resolutions can decide as to what explanation is required by the profession.

The PRESIDENT.—I will ask our Secretary to be kind enough to read the proposition.

The SECRETARY (Mr. A. W. Hill) read the resolution.

Mr. GRAY.—I shall be pleased to second that, sir, and may I ask you if you will kindly produce the shorthand reporter's notes which were taken at the committee on this case, as I think it is only right that we should get the truth, so that every member of the profession may assist in arriving at the truth.

The PRESIDENT.—I am afraid the last part of your question is one which I must refer to the Council. I am not in a position myself to give you a copy of the shorthand writer's notes.

Mr. GRAY.—Why not?

Mr. W. ROGER CLARKE.—May I ask the Secretary to read that bye-law which refers to documents kept in the custody of the Secretary? I forget the number at this moment.

Mr. THATCHER.—This, I think, is the one you refer to. It is bye-law 36—"No book or document in the custody of the Secretary or of any officer of the College shall be open to inspection unless to members of Council, except by order of the Council or of the President; but no book or document shall be available which has not been before the Council."

Mr. W. ROGER CLARKE.—I think that is the bye-law to which I referred, sir, and it says "except by order of the Council or of the President." So that the President, it seems to me, has power to order these notes to be produced.

The PRESIDENT.—Admitting that your legal view or aspect of this is correct, you can quite appreciate that I should not think myself in a position to carry out your wishes without previously consulting the Council.

Mr. R. ROGER CLARKE.—I can quite appreciate, sir, that it is within your choice, as President, as to whether you order the notes to be produced or not. I think I am right in maintaining that the President has the power of doing so if he chooses?

Mr. GRAY.—If he refuses it is the only evidence we have by which we can tell whether the Council have done their duty or not.

Mr. BARRETT.—May I say, although I am totally opposed to the proceedings which have been instituted to-day, that I think there can be no objection to these reports going before you. We are all desirous that the truth should be arrived at, and I, personally, should not have the slightest objection to producing them. Of course, sir, I should much prefer you should exercise your own discretion.

Professor PRITCHARD.—If I may say a word, sir, I think the whole of what we have heard this afternoon is entirely on hearsay, and I think my friend Mr. Bower will tell you that hearsay is not evidence.

Mr. W. ROGER CLARKE.—It is in print. You were not in the room, Professor Pritchard, when it started.

Mr. THATCHER.—*Here* are the shorthand notes. This case, as I know from painful experience, took five hours to go through with the shorthand writer writing at such top speed during the time that he appealed to me once or twice not to speak quite so fast. I think it would take, as you can judge for yourselves, about three or four hours to read these notes through. But if there is any point or any question that you would like to refer to, I think, as I know pretty well the sequence of the witnesses and so on, that I could refer you to it, and I shall be very glad, with the President's consent, of course, to assist you in any way possible. Is there any particular witness whose evidence you would like, or the statement of the prosecutor—at least there was no prosecutor; I suppose I was the prosecutor—the statement by the complainant or by the defendant himself?

Mr. GRAY.—On what grounds did the three in the majority come to their conclusion?

Mr. THATCHER.—That I cannot tell you, because I was put in this position, I was challenged by the defendant's counsel as to what position I intended to take up. The position I endeavoured to take up at that inquiry was that of judge advocate of court martial, to get it through with-

out fear or favour to one side or to the other. That point was objected to by the defendant's counsel, who wished me to leave the Council entirely without legal assistance, and to conduct the case for the prosecution myself. I took him on his own ground and did it. I endeavoured to get out those facts as fairly as I could, both in the interests of the man himself and of the profession. I had no interest in driving the man out of the profession if he ought not to be punished, and I endeavoured to conduct that inquiry fairly to the profession and to the man himself. The result of this was, that when the time came for the committee to give their decision, I, as prosecuting solicitor, in common with the solicitor on the other side and the counsel and the witnesses, had to withdraw, and I was not present at the discussion which took place. I know, however, that it was a long one, and that we were kept down in the waiting-room so long that Mr. Wilde, the counsel, said—"I shall not stop any longer"—and he did not. The decision, when arrived at, was communicated to the solicitor for the defendant and myself, and I believe some of the witnesses who came into the room as well, but I know the discussion was a long one. If there is any point in the inquiry that you would like, I will refer to it.

The PRESIDENT.—There is no objection to your seeing the document here.

Mr. M'ARTHUR.—If, as Professor Penberthy has said, there was not a tittle of evidence against the defendant, why are we to take no steps to punish the man who had made the complaint?

Mr. GRAY.—It states in the Charter that the Council shall abide by the decision of the majority of the Registration Committee as to the facts of the case.

Mr. THATCHER.—You are quite right, Mr. Gray, only you quoted the Charter instead of the Act. The words were correctly quoted by the opener, viz., "That the finding of the committee is to be conclusive as to facts, but the Council has the power to form their own opinion independently of the committee itself." I want rather to look upon it in this way, as to the reasonableness of what is going to be done. Before you can strike a man off the Register you have to do this. You must have a meeting of the Council, and there must be present at the meeting three-fourths of the total members of Council, and two-thirds of them must vote in favour of the man being taken off. There is an old adage, you know, to the effect that you can take a horse to the water, but you cannot make him drink, and it seems to me that when the Registration Committee have brought this matter before the Council, they cannot force the Council to come to a vote if the Council do not chose to come to a resolution. I was at the meeting and I heard what was said, and what happened was this. Here are five men, and they sit here for five hours. They had before them two legal gentlemen; witness after witness was called, and they had an opportunity, which the Council do not get, and which certainly we have not got at this present moment, of observing the way in which each witness gave his evidence, his demeanour, and everything about it. The result of that, after five hours' work and five hours' struggle, was that three held one opinion and two the other. The matter is brought before the Council, and the question is asked:—Why did not the Council come to a decision. My wonder would have been if the Council had come to a decision after hearing what was said on the one side and on the other side. I should have been very much surprised if they had agreed, and I think

the Council exercised a very wise discretion in saying, If you cannot agree, we will just leave the thing alone. What could they do otherwise?

Mr. WOOFF.—Do I understand from your remarks, sir, that when you appoint a committee it is a mere matter of form, and whatever they do it is pooh-poohed by the Council?

Mr. THATCHER.—Dear me, No! I merely say that in this case my wonder would have been if the Council had arrived at a unanimous decision.

Mr. WOOFF.—Five gentlemen come here and give the whole of the day to the matter, which the other members have not done, and then, whatever they tried to do, the encouragement they get is, "You know nothing at all about it; we will decide for you."

Mr. THATCHER.—My point is this, that the Council would have acted very unwisely if they had decided it upon a single vote—three one way and two the other. Suppose a man had been there who had an opposite opinion—you see that is the position—remember what that would mean. Our laws are like the laws of Draco; his punishment was death; our punishment is professional death. If you strike a man off the Register you ruin him, and is the Council to be asked on the vote of one man to strike another off the Register and ruin him for life? I do not think you will find any body of fair-dealing men to come to such a decision as that. Certainly I should shrink from it. I have my own opinion about this case, and I shall hold it, and if I had been on the Council I certainly should have shrunk from accepting such a very serious responsibility as that. The Courts of Law are open, and this case could have been tried in a Court of Law, and you could have got the verdict of a jury if anybody injured you, but when you ask the Council to do so, then I must say that I consider it is a responsibility which they were very wise in declining.

Mr. W. ROGER CLARKE.—May I answer Mr. Thatcher, sir, at this moment?

The PRESIDENT.—I think not; it is like arguing with the judge to argue with Mr. Thatcher. I should like to know if any other gentleman wishes to make any remarks upon this question.

Mr. WOODROFF HILL.—Mr President and Gentlemen, before I support this movement, as Mr. Thatcher has told us that it would take three or four hours to read those shorthand notes through, I would suggest that they be printed and circulated amongst us. It is only right and just, because the case is far too serious for five members of Council to deal with. It is not a fair hearing, and that I shall maintain when I support it.

Mr. THATCHER.—Of course, Mr. Hill, you quite understand this. This is a legal point. There is a lot in these shorthand notes which if published might be considered libellous, and who is going to bear the responsibility of an action if anybody chooses to bring one?

Mr. WOODROFF HILL.—Then I presume the members of the profession might be allowed to come here and see them without having them printed and circulated.

The PRESIDENT.—Yes, they will be open for your inspection, but of course we cannot allow the document to go out of our charge.

Mr. THATCHER.—You will want half a day to do it.

Mr. WOODROFF HILL.—I think it is worth half a day, because this is with reference to a man who is much esteemed in the profession and who has been blackballed by another man, and I am determined to get at the bottom of it.

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Mr. GRAY.—Would any of the members present who sat upon that committee give us the reason why they considered him innocent?

Mr. WOODROFF HILL.—Yes, that is what I want to know.

The PRESIDENT.—I do not think you can expect that.

Mr. GRAY.—My object is not to get the man struck off the Register, but only to arrive at the truth.

Mr. BARRETT.—As a member of this Council, and as one of those who sat upon the committee, I think I ought to make a few observations to the meeting. I did not intend to do so, and perhaps my brother Councillors will blame me for rising upon this occasion, but I think we are all desirous, both those who oppose and those who are in favour of the man, that at any rate the truth should be arrived at. I should like to say at once that I think Mr. Roger Clarke has opened his case in a very temperate manner, and that at any rate the remarks which have fallen from him are well worthy not only of the consideration of the Council, but of the members who are here assembled. I can assure you that the members of the Committee who sat in judgment on this case were most anxious to arrive at a true and correct conclusion. I cannot help thinking that it is to be regretted that the committee was such a small one, but whether there were five members present or whether there were twenty, the responsibility was the same, and we were compelled on that occasion, after hearing evidence, to come to some definite conclusion, aye or nay; and the Committee after five hours' work, and after hearing counsel on the one side, and Mr. Thatcher on the other, who, if I may say so, very ably conducted the prosecution and showed no vindictiveness, the majority of the Council came to the conclusion that the man was guilty. You ask, and perhaps rightly ask, why the Council did not act on that suggestion. I will tell you. I perfectly agree with the remarks which have fallen from Mr. Thatcher, that the Council would have acted most unwisely if it had taken any other course than that which it adopted. There were five of us present, and two came to the conclusion that the man was innocent. Some gentleman has asked, Why did they come to that conclusion? I can only say that the minds of men differ, and that facts which convince one man do not necessarily convince the other. At any rate, two gentlemen, in the honest exercise of their best judgment, came to that conclusion, that this man was not guilty, and, sir, the evidence was very conflicting, and I am not surprised at it. Three of us came to an opposite conclusion. I do not hesitate to say that upon that evidence which I heard I believed that the man was guilty of the charge which was brought against him, but having said that, I go no further, and I say, in view of the conflicting testimony, and in view of the uncertainty of the evidence, and in view of the narrow majority, the Council acted wisely in coming to the decision at which it arrived.—(Hear, hear.) You ask, Why should the Council have come to that conclusion? Gentlemen, Why should it have come to any other conclusion? If a man is brought before an Assize Court, the verdict of the jury has to be unanimous, and what would you say of a judge, and what would you say of the laws of your country, if, upon a bare majority, a man was to be hanged. That was the case here. I do not regret the step I took upon this occasion when the matter was before the Council. I told them plainly that I believed the man was guilty, but I said you incur a heavy responsibility if you find him guity, having regard to the fact that by one vote, and one vote only, was that man condemned. I rather regret,

and I am going to take this opportunity of saying so, that he was condemned by that one vote, and I am going to be honest in this case; I am going to tell you what happened. Mr. Banham came to me at my chambers and asked me if I would hold a brief on his behalf. I said at first that I should be pleased to do so, of course resigning my position on the committee before doing it.

Mr. BANHAM.—Before you go any further, Mr. Barrett, I think I ought to say in justice to this meeting, that I did not ask you anything of the kind. I simply stated that Mr. Thatcher told me that I ought to do so, and I came to ask your opinion.

Mr. THATCHER.—I told you, Mr. Banham, that you ought to prosecute, and I say so still.

Mr. BANHAM.—I am much obliged for your opinion, Mr. Thatcher, but I did not come here to ask you.

Mr. BARRETT.—I have known Mr. Banham for many years, and I respect him, and always have done, and I am only stating what actually occurred, which was this. He came to my chambers to consult me, I presume, and ask my opinion. He said he was desirous of prosecuting Mr. Bennett. I did not know why he should prosecute him, and I see no reason why he should vindictively desire to prosecute him now. I do not know in what capacity Mr. Banham came to see me at my chambers. I only know that he did come, and asked me to resign my position on the committee in order to act for him. Having discussed the matter fully with him, I came to the conclusion at once that he ought not to spend any money, and I said, "Why should you go to any expense? You are not the prosecutor, your are merely the informant, and it is the duty of the College to prosecute him," and it was upon my resolution that Mr. Thatcher was appointed to conduct the prosecution and so relieve Mr. Banham. However, I did not accept the brief, and I did not resign my position on the committee, but I did what I ought not to have done, and what I have ever since regretted, and that is to sit upon the committee in order to judge Mr. Bennett. If Mr. Banham had not come to me in my professional capacity I should have said at once, "I cannot discuss the matter with you because I should be prejudging the case," but it did not occur to me until after the committee had sat that I acted unwisely in sitting upon that committee. I endeavoured, however, to the utmost of my power, and I believe I succeeded, in hearing the evidence, and determining upon it impartially. I was very careful that nothing that Mr. Banham had said to me should influence my judgment, and he left me a report of the case, which is at my chambers now. I was most careful that my mind should not be prejudiced for or against the man, and after hearing the evidence on both sides for five hours, and most conflicting evidence it was, I myself came to the conclusion that he was guilty, but I do not blame those who in the honest exercise of their judgment came to an opposite decision.

I think on the whole it is to be regretted that this meeting has been called to-day, and I am surprised that the speeches which have been delivered, though temperate, have been so feeble and ill-conceived. Mr. Bennett has had a trial; the matter is *res judicata*, and my opinion is, you cannot fairly re-open the case against him now. It is in the nature of a criminal prosecution; he has been tried, he has been found guilty by the committee who dealt with it as a question of fact, but the Council in the honest exercise of their discretion—and wise discretion—have found in view of the narrow

majority that he ought not to be struck off the Register. That is my opinion to-day, and I hope the members of this profession will not rashly pass a resolution which they cannot uphold, and which I do not believe they can enforce. You have confidence in your Council, you have re-elected several of them to-day, they have served you well, and also with regard to this case, and whatever you may say, they have come to the only conclusion which wise men could have come to. (Loud applause.)

Mr. WOOFF.—This meeting was called to ask the Council for an explanation of their conduct, which we considered was not fair to the profession generally. I believe that is the object of the meeting, not the re-opening of the trial.

Mr. W. ROGER CLARKE.—Yes, I ask Mr. Barrett to look at the terms of my motion. It simply asks for an explanation from the Council.

Mr. BARRETT.—I believe Mr. Wooff is right, and that is why I spoke of the feebleness of the speeches. I am not speaking of the present speakers, but many speeches have been made, and many letters written, and the sole desire of those, so far as I understand, is that the case should be re-opened by the Council. Mr. Clarke has argued that the case should be re-opened, and yet he shrinks from bringing forward an adequate motion. That is my point.

Mr. W. ROGER CLARKE.—No, the words are that it should be explained.

The PRESIDENT.—Yes, that is so. The requisition is—"That this meeting is of opinion that the action of the Council *re* the Cambridge case has been so unsatisfactory as to call for immediate explanation." I presume you mean from the President and the Council.

Mr. W. ROGER CLARKE.—Exactly.

The PRESIDENT.—It is a pity that you did not add that.

Mr. W. ROGER CLARKE.—I will do it at this moment if you like.

The PRESIDENT.—I think Mr Thatcher and also Mr. Barrett have given such explanation as it is in our position to give.

Mr. BANHAM.—Mr. President and Gentlemen, nobody regrets the cause of this meeting more than myself, and I am very sorry that Mr. Barrett has drawn your attention to the fact that I went to him on purpose to get him to carry a brief for me. I may say that I had never any intention of doing it. I told Mr. Thatcher so when he first asked me to take the case up. I simply said, "No, I have nothing to do with the case. I am not going to bring any action against the man. It is for the College to do that. I am simply a witness, and whatever you ask me, I am perfectly willing to say all I know about it," which I did, "but," I said, "there is only one gentleman I know who is capable of understanding a thing of this kind." He said "Who is that?" "That is Mr. Barrett." "Well," he said, "would you care to see him." I said, "I do not mind seeing him; his chambers are close here; I shall be very pleased to see Mr. Barrett," and I went accordingly, and I told Mr. Barrett what I told Mr. Thatcher, and he said, "Quite right, Mr. Banham, it has nothing to do with you. All you have to do in the matter is as a witness, and you should not spend any money over it," and I did not intend to spend any money about it.

Mr. BARRETT.—I must rise to a point of order, sir. Mr. Banham is not accurate. He asked me first of all if I would accept a brief on his behalf. I discussed the matter with him, and I said, "No, do not spend your money; let the College prosecute." He came to me purposely to give me a brief.

Mr. BANHAM.—I beg your pardon, I did nothing of the kind.

The PRESIDENT.—The difference of opinion on this matter, gentlemen, is evidence to you of the extreme difficulty there must have been in deciding upon the case that we had before us in connection with glanders.

Mr. BANHAM.—What I particularly wish to know is on what grounds the two in a minority thought that the gentleman was not guilty. It seems to me that the Council did not act and do their duty simply because there was a difference of opinion in that committee. Now I maintain this, that if we have a committee, and we bring any case before them, all one person on that committee has to do is to disagree with the others, and then the Council can say, "Oh, well, the committee was not agreed, and we will dismiss the case." But that is not what our juries do; that is not what the law does. If the jury does not agree they do not dismiss the case, they simply postpone it and have a fresh jury, and re-try the case. This opens out a particularly important point, and especially to us as practitioners. We are none of us safe. If we bring a case up before our Registration Committee what do they do with it? Simply shelve it, and nothing more is heard of it. (Cries of "That is untrue.")

The PRESIDENT.—I must call you to order, Mr. Banham, and I must ask you to withdraw that remark.

Mr. BANHAM.—I withdraw it, sir, but I say that all they have to do is for one member of that committee to dissent from the others, and we can always dissent, and not give any reasons why we dissent. I happen to have had a conversation with one of the gentlemen who dissented, and not one thing could he say in the man's favour, and no reason could he give for saying that he was not guilty. Now, I maintain that that is not the way that we, as a profession, want these cases tried. We want them tried faithfully and honestly, without fear or favour to anybody or anything. It has been said that this man is my rival—it has been hinted at least—it was not said, that this man is my rival, and that I brought this case against this man simply because I did not like him. I have no animosity in this case at all. I brought him before this Council because I believe, and I truly believe to-day, that it is a most dastardly piece of business to do to another member of our profession, and also to his client. So far as I am concerned, I had nothing whatever to do with the case beyond being an inspector. That is all I had to do with it. When these cases are brought before you they should be treated as impartially as they possibly can be treated, and I am very doubtful whether if you read that transcript there is any member in this room who would think that that case was treated impartially. Personally, I have not very much faith in this clause at all. It seems to me that if a man advertises—I do not care how he advertises—he is an awful chap; he ought to be struck off the rolls, and he is not fit to be a member of our profession. That is not my view. There are many worse things than advertising, and those are the things that I should like our Council to undertake and to stop. [A voice: "You advertise."] Yes, I do, sir, and I am not ashamed of it. I have never advertised excepting as a gentleman, yet. But that is quite outside this case. What we want now, or at least what I ask, is for the Council to give us some reason why the two in the minority thought that this gentleman was innocent. Mr. Barrett has told us that he has no doubt that he was guilty.

Before I sit down, I should just like to say one word as to the number

who tried that case. I may tell you that three members is a quorum, and three is quite sufficient to try any case, and you have no right to find fault with the few that were sitting on that committee, and if five members cannot try any case——

The PRESIDENT.—I do not think the Council have complained of the number, have they?

Mr. BANHAM.—I thought that was one of the things that ruled the Council a good deal.

The PRESIDENT.—I do not think that was mentioned.

Mr. W. ROGER CLARKE.—Mr. Trigger used that very complaint as to the number of the Councilmen, that it was a very small committee, and it was much to be regretted.

Mr. BANHAM.—At any rate, I do not think that is the kind of excuse that the Council should make for not carrying out their duty in these cases.

Mr. POLLOCK.—I rise to propose a direct negative, sir, to the proposition which is before the meeting. After listening to the statements on both sides, I think it is only right and proper, and it is the view of several of us here who have studied the case, to thank the members of the committee for having so ably looked into the matter, and given such a straightforward opinion with regard to it. For that I think we ought to thank our Council, and also for having weighed the matter up in the light of the small majority; and we ought also, I think, to thank especially Professor Penberthy for guiding the mind of the Council to a right conclusion.

Mr. WOOFF.—I should like to second that. I think that, considering the action of the Council has been so honest and above board, now their only duty is to have the shorthand notes published and circulated to the profession, and let the profession read those notes, and then they can say at once, "We also believe that the man is not guilty." It is so ably set out in those notes. The Council have done their best; now give the members an opportunity of showing their satisfaction. I have no doubt that we shall be satisfied that the Council have done the right thing in what they have done, but let us read the notes for ourselves, and we can then say, "Now we have testimony that the Council has acted wisely, we have confidence in them, and we trust them, they will do the right thing, and they are the proper men in the right place." Let them prove that to us by simply having those shorthand notes printed and published and circulated to the profession, and I am sure at a very early date there will be another meeting to congratulate the Council on their very able efforts.

Professor PRITCHARD.—Allow me to say a few words in support of what has already been said. I do support what your last speaker has suggested, and I really think that we shall be losing sight of the good work that the Council has done if we do not back them up.

The PRESIDENT.—We have heard what has been proposed, "That this meeting is of opinion that the action of the Council *re* the Cambridge case has been so unsatisfactory as to call for immediate explanation." That has been proposed by Mr. Roger Clarke, and seconded by Mr. Gray. Then there is an amendment by Mr. Pollock before the meeting.

Mr. THATCHER.—Do you think, sir, that that can be put as a direct vote in the negative?

Mr. CARTER.—Mr. Pollock went further than a negative in his resolution.

The PRESIDENT.—The Secretary will read Mr. Pollock's motion.

The SECRETARY.—"On the motion of Mr. Pollock, seconded by Mr. Wooff, the members of this meeting approve the action of the committee and Council."

[Mr. Pollock's motion was put to the meeting and carried by 13 votes to 8.]

Mr. WOOFF.—There is another thing I wish to say, and that is, that it has been hinted that this charge has been brought by Mr. Banham with a vindictive feeling. I should say that the Council should take steps to either clear or find him guilty of that suggestion. It has been stated that it is not brought in the interests of the profession, but is purely of a vindictive nature.

The PRESIDENT.—I am afraid I must ask you to bring that up on another occasion.

Mr. WOOFF.—You evidently want to close the meeting rather in a hurry. I see the Councillors are leaving, and I suppose they want to catch a train, which is more important than the honour of the profession apparently.

Mr. W. ROGER CLARKE.—Is no man able to propose another motion, sir?

The PRESIDENT.—Not now; the meeting has finished.

Mr. BLAKEWAY.—I think before we part that we should propose a hearty vote of thanks to the Chairman for the excellent manner in which he has conducted the meeting, and the impartial way in which he has treated every speaker.

Mr. SQUAIR.—I have much pleasure in seconding the vote of thanks.

The vote of thanks was put to the meeting and carried with acclamation.

Royal College of Veterinary Surgeons.

THE EXAMINATIONS IN SCOTLAND.

AT meetings of the Board of Examiners held in Edinburgh and in Glasgow on May 17th for the Written, and on and between May 21st and 25th for the Oral and Practical Examinations, the following gentlemen passed their Final Examination, qualifying them to be Members of the Royal College of Veterinary Surgeons:—

Dick College.—Messrs. P. Braid, R. Bryden, W. T. Dunstan, W. Harris, T. J. Keall, C. P. Hynes,* W. A. Jelbart, J. S. Nimmo, and J. Warwick.†

New College.—Messrs. H. Barrow, S. C. Binks, H. B. Kauntze, W. Lawson, H. H. Lord, J. P. Stableford, A. A. Walker, J. D. C. Ward, G. T. Willows, M H. Sowerby-Coo, A. Scotson, and W. Greaves.

Glasgow College.—Messrs. A. P. Logan, F. P. Beck, W. G. Forbes, W. M. Ferguson,† A. M'Dowall, A. Logan, J. H. Maclaren, and J. Danskin.

London College.—Messrs W. J. Lewis and A. Leaming.

The following passed their Third Examination :—

Dick College.—Messrs. G. E. Anderson,* W. J. Colebatch, E. Dunstan, W. Forbes, W. Munslow,* T. B. Redding,* W. Robertson, W. D. Sergeant, J. D. Whitehead, J. Whitty, and H. Yeomans.
New College.—Messrs. W. Hepburn* and H. Kirby.
Glasgow College.—Messrs. J. M'Farlane, G. W. Weir, N. H. Macalister, and H. G. Rogers.

The following passed their Second Examination :—

Dick College.—Messrs. A. H. Andrew, W. K. Barron, E. Berry, C. J. Cameron, J. G. Cattell,† G. Crowhurst, G. W. Davidson,* W. S. Gillespie, M. J. Herriott, H. L. Jones,* R. E. Montgomery,* J. O. Powley, J. H. Ripley, W. A. Simson, H. M. Williams, and J. Seton.
New College.—Messrs. S. Elley, R. M. Jones, and C. H. Wadlow.
Glasgow College.—Messrs. J. Tait, J. F. Ranken, R. Bickerton, P. T. Tubridy, and H. M'Intyre.

The following passed their First Examination :—

Dick College.—Messrs. J. M. Barry, J. S. Bowden,* J. Craig, A. de R. Gordon,* D. Hutch, W. F. M'Connell, W. J. Moody,* S. G. Richardson,* A. A. White, and J. R. Hayhurst.
New College.—Messrs. T. Bone,* J. Cameron, J. B. Chadwick, H. E. Cross,* W. G. Darling, E. E. Elphick, S. H. Gaiger,* A. E. Massey, J. Macaulay, J. T. Muirhead, H. W. Robinson, R. Tindle, and H A. Tarner.
Glasgow College.—Messrs. W. P. Begg, D. Macleod, L. S. Sedgwick, W. W. Campbell, and J. B. Thom.*

An examination for the Fellowship Degree was held in Edinburgh on May 24th, when the following gentlemen were admitted to be Fellows of the Royal College of Veterinary Surgeons :—

Mr. J. H. Shepherd, Cape Town, Cape Colony.
Mr. W. E. Ison, Atherstone, Warwickshire.
Mr. T. O. Richardson, Lytham, Lancashire.

Marked thus * passed with 2nd Class Honours.
„ „ † „ „ 1st „ „

R. RUTHERFORD, F.R.C.V.S.,
Sec. Board of Examiners.

Royal College of Veterinary Surgeons.

TO THE MEMBERS OF THE
ROYAL COLLEGE OF VETERINARY SURGEONS.

GENTLEMEN—I beg to offer you my sincerest and most respectful thanks for the great honour you have done me in re-electing me a member of your Council.

I have ever esteemed it a special privilege to be a member of this Council, and to take part in its deliberations. I have con-

stantly endeavoured to aid the schemes of the Council by contributing such knowledge and skill as I possess to its discussions, and although I sit primarily as a teacher in a Royal Veterinary College, I endeavour to avoid selfish, and even sectional, considerations as much as possible, and to strive only for the good of the profession at large. If I have seemed occasionally to be actuated by merely preceptorial motives, and to have been over-anxious to obtain advantages for the striving youth of the profession and their teachers, it has simply been because I believed I saw the end from the beginning, and wished to train worthy successors to the present body of veterinary surgeons. Such a policy must commend itself to all wise and prudent men, especially to those who have sons of their own destined to follow in their fathers' footsteps.

One of my chief objects during my tenancy of the councillorship, and one of the schemes which I hope further to support on my return to the Council, is the appointment of meat inspectors. It is a fundamental article of my professional creed that none but veterinary surgeons ought to hold these inspectorships, and I consider any other opinion rank heresy. I am glad to notice that heretical opinions of this sort are gradually giving way under pressure of our efforts, but much still remains to be done. For my own part I should like to see all these appointments made imperial rather than municipal or local. We should then get rid of the inequalities and irregularities which at present exist, and which somewhat disfigure the administration of our sanitary laws. It is most desirable to have one standard of excellence and one code of punishment for offenders. Otherwise we may find rascally dealers *diagnosing the inspectors*, and determining, according to a nefarious code, on the market to which they are to send their meat supplies in this case or in that. Further, we may have inspectors opposing one another in their evidence owing to differences of method (as determined by non-professional authorities), and so providing a spectacle for the ridicule and contempt of the profane. All reforms demand individual initiative and corporate energy: my constant desire shall be, on my return to the Council, to give what I have of the former and do all I can to increase the volume of the latter.—I have the honour to be, Gentlemen, your obedient servant,

W. OWEN WILLIAMS.

NEW VETERINARY COLLEGE,
EDINBURGH, *June* 1901.

PERSONAL.

On May 23rd, at Todmorden, Henry Taylor, M.R.C.V.S., Professor, New Veterinary College, Edinburgh, to Jennie, Daughter of County Alderman C. Hoyle, J.P., Roomfield House, Todmorden.

Original Papers.

DERMOID CYSTS: WITH RECORDS OF TWO OCCURRING IN THE TESTICLE.

BY HENRY TAYLOR, M.R.C.V.S., NEW VETERINARY COLLEGE, EDINBURGH.

DERMOID cysts are often regarded as belonging to a special class of Teratomata, and they are characterized by their inner wall being composed of tissues, having the same structure as normal skin. They occur, however, where skin or its appendages are not found in the normal condition.

Three principal varieties of dermoid cysts are described—(1) a unilocular cyst possessing the characteristic features; (2) a cyst with two or more cavities, each with characteristic dermoid contents,—the component cysts having probably arisen independently, not by proliferation; (3) an ordinary proliferating cyst, one or more cavities of which contain characteristic dermoid structures.

The characteristic feature about these dermoid tumours is the presence in the cyst wall of portions of true skin, but this skin may only cover, and in fact generally only does cover, a portion of the cyst wall. Sometimes the whole cyst may be lined with skin, but usually the cutaneous structures are confined to a small area, or even to a small loculus in a multilocular cyst. The wall of the cyst may be either thick or thin, but it has generally a thick connective tissue wall.

Dermoid cysts are found in various parts of the body, but the chief places where they are met with are the following:—the generative organs (testes and ovaries), the sinuses of the head, the region of the orbit, the parotid region, the base of the external ear, and the peritoneum. I have seen a cyst removed from the shoulder of a horse which had the usual dermoid characteristics. In the human being the ovaries are regarded as the site where dermoids are most frequently met with, but even there they are not a common variety of ovarian tumour (3·5 per cent. according to Olshausen). They are found in the young as well as in the old; some have been recorded in children at birth, and others in patients upwards of eighty years of age. They are of slow growth, and it is an interesting fact that the presence of a dermoid cyst in an ovary or testicle, does not always destroy the function of the organ in which it is situated.

In the domesticated animals dermoid cysts are not by any means of common occurrence, but when they do occur they are most often met with in the horse. In that animal they are generally met with either in the testicles or ovaries, or else in the structures around the base of the ear, the latter is the commoner site, and, since it leads eventually to the formation of a sinus of more clinical importance. One or two cases of dermoid cysts in the dog have been recorded. In the veterinary periodicals there is a paucity of literature on the subject of dermoid cysts occurring in the generative organs, and the same may be said of the veterinary text-books.

Möller in his "Veterinary Surgery" mentions fistula of the ear due to the presence of a tooth or teeth in the tissues around the base of the conchal cartilage or in the squamous portion of the malar bone, but makes no mention of dermoid cysts in his chapter on diseases of the testicle.

Williams in his "Principles and Practice of Veterinary Surgery" states that dermoid cysts have been found in the testicle and other parts of the

body, but "the most important of those cysts which are teeth-bearing, are those immense collections of imperfect teeth-forming tumours within the antrum." I have never met with tumours composed of dental structures in the superior maxillary sinus, but quite recently we had brought to the College a cart gelding seventeen years old, which had had for a "long time" a chronic nasal discharge. He was brought because of a swelling, which had appeared below the eye on the side affected with the nasal gleet. As pus in the superior maxillary sinus was supposed to be the cause of this enlargement, he was trephined in the usual place, but after boring through a considerable thickness of bone no cavity could be found. A like result was obtained when the swelling was trephined at a spot a little superior and posterior, over the root of the sixth molar. When the animal was destroyed the cavity of the superior maxillary sinus was found to be completely filled with a bone tumour.

Dermoid cysts not only contain skin but very often cutaneous appendages as well. The following structures have been found in dermoids:—Sebaceous glands, sweat glands, hair, teeth, horn, nail, bone, unstriped muscle, and nerve tissue. Bland Sutton describes the cysts as sometimes containing a mass resembling the mammary gland, a rudimentary nipple being present; but the mass is not composed of gland tissue like the mamma, but of fat, and the gland ducts present are modified sweat or sebaceous glands.

The hair contained in dermoids grows from follicles as in the normal skin. Single hairs may be found growing, or the hair may be curled into a ball and mixed up with the retained secretion of the sweat and sebaceous glands. The hairs may grow to a length of twenty inches, or they may become detached and form locks lying free in the cavity. The colour of the hair is variable, and may not be of the same shade as that found on the exterior of the animal. It is said to differ as a rule and to change with age, in elderly subjects becoming quite white.

Sebaceous glands are numerous in the cavities, and are of a large size; their secretion helps to compose the buttery or oily *débris* which is found in the cyst.

Sweat glands are not so numerous as sebaceous glands. Bone and cartilage occur in irregular shapeless masses, or as flat plates embedded in the wall.

Teeth, if present, are usually found collected together in an irregular mass; they are of the usual composition, containing enamel, dentine, and crusta petrosa, and they may be connected to pieces of bone. In number they vary greatly; in a dermoid from the human subject, as many as 300 have been described, but it is unusual to find more than a dozen. The teeth found in dermoids vary also in shape, and resemble canines, incisors, and molars. The cysts found in the facial sinuses which contain teeth have been classed as dental and radiculo-dental, according as the root or the crown of the tooth projects towards the centre of the cyst. In the latter, which is the rarer condition, it is the root of the tooth which is directed towards the centre of the cavity, whilst in the former it is the crown. Dental cysts in the temporal region are most often met with in young horses during the dentition period. In the early stages the swelling is soft and practically painless; it varies in size from a nut to an egg, and it may remain in this condition for a long time. More commonly, however, the skin over or near the affected spot ulcerates, and the fluid contents of the

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cyst escape, leading to the formation of a sinus. This sinus as a rule has its outer opening a little in front of, and a short distance from, the base of the ear; sometimes it may be nearer the middle line or to the zygoma, and it occasionally has its opening somewhere over the conchal cartilage, the cyst then being situated somewhere in the zygomatic region. The sinuses then, in these temporal cysts may vary in length from an inch to three or four inches, the discharge from them is thin, greyish in colour, and may or may not have an odour. Cicatrices may occasionally be observed in the neighbourhood, owing to the sinuses having closed and healed. The teeth found in these cysts in the temporal region usually have the characteristics of molar teeth, but are often of an irregular shape.

Nerve tissue has been described in connection with the pulp of teeth by Salter, but the existence of *nerves* in dermoids requires further investigation.—(Bland Sutton.)

Muscular tissue is rarely present in the cyst wall, and is then almost always of the unstriped variety.

Besides the above-mentioned contents of dermoid cysts, they contain usually a thick, oily, or fatty substance, the consistence of which varies according to the surrounding temperature. This greasy substance is composed of epithelial cells, fat and cholesterin, and mixed along with it one finds hairs which have been shed into the cyst cavity.

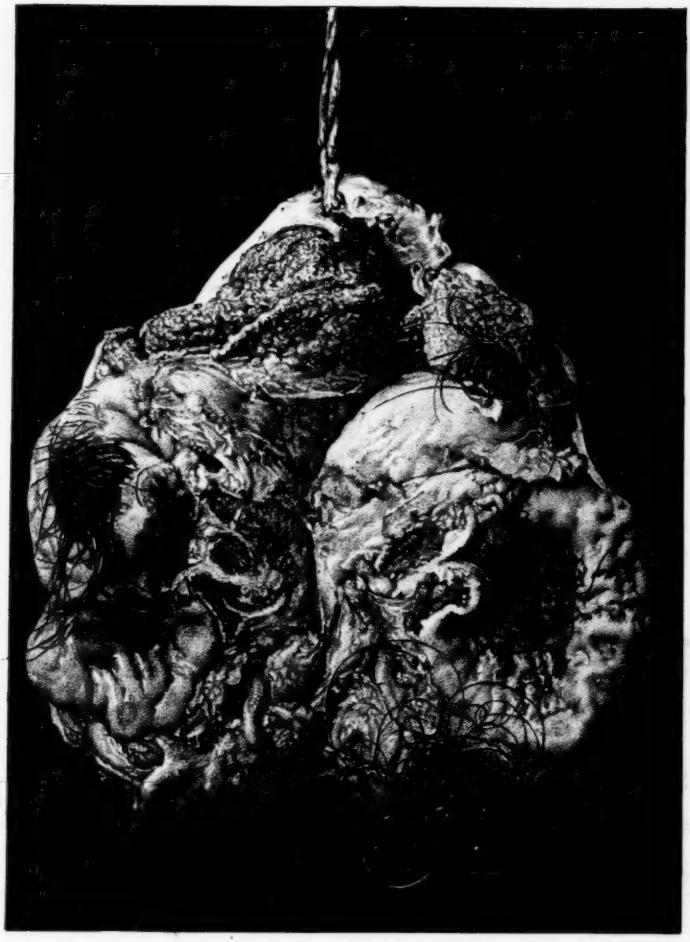
The structures known as epithelial pearls in connection with dermoids, are round bodies which are occasionally found free in the cavity, and which are composed of epithelial cells. They look like the lens of a fish which has been boiled.

Dermoids are generally considered to be innocent tumours, but they may contain masses of other tumours which are malignant, such as sarcoma and carcinoma. The cysts when in the ovary sometimes rupture, and according to Bland Sutton may then show transplantations on the surrounding peritoneum.

Within the last couple of months we have had the good fortune to have sent to the College two beautiful specimens of dermoid cysts in the testicle.

The first one, a section of which is depicted in the accompanying lithograph, was sent by Mr. Forgham, M.R.C.V.S., of Market Drayton, and had been removed by him from a yearling cart colt, the other testicle being quite normal. Mr. Forgham remarks that, although he has castrated many hundreds of horses and colts, he had never before met with a like case.

The lithograph depicts the first specimen about the natural size, and shows fairly well the characteristics of a dermoid cyst. To demonstrate the parts the testicle was cut along its border as one cuts a kidney, and then laid open. The upper part is composed of gland tissue, and the lower of the dermoid. There are five separate loculi in connection with the cyst, four of which contain hair. The one on the upper right hand side is small, and contains a lock of loose hair in addition to a few fixed ones. Some of the hairs in this loculus are of a grey, whilst others are of a brown shade. One of the latter measured four and three-quarter inches in length. The loculus below the one above described is lined by a smooth membrane, which is thrown into folds, and resembles the mucous membrane lining some parts of the alimentary tract. This cavity has only a few hairs growing inside it, and part of it is pigmented. The lowermost cavity on the right hand side contains the most hair, and here it is of a jet black hue and much coiled. One hair when drawn out was found to be



DERMOID CYST OF THE TESTICLE.

seven inches long. The *débris* of the cystic contents is still shown to be sticking round the hairs. The small loculus near the middle line and towards the bottom, left hand side (shown deeply shaded in the lithograph) is about an inch deep, but contains no hairs; it has a smooth lining. The hairs of the superior loculus on the left hand side are on an average about two inches long, and many are matted together by the detritus which this cavity contained. In the centre of the whole mass there is an irregular curved bony plate, shown in section in the lithograph, and at the inferior part of the left hand side there is also another irregular bony mass. The rest of the dermoid seems to be made up of fibrous tissue. The entire mass of gland tissue and the cystic growth was enclosed in a serous covering like the normal testicle.

The second testicle, which was sent by Mr. Inglis, M.R.C.V.S., of Forfar, was from a cryptorchid, and was removed from the abdominal cavity. It was much larger than normal, measuring six and a half inches in length. Gland tissue composed the central part of the testicle, whilst the two extremities were composed each of a dermoid cyst. The anterior extremity under the usual serous covering had a connective tissue wall, thin in some parts, in others thick, and strengthened by plates of bone and cartilage. In the centre of the cavity was a roundish irregular mass about the size of an orange, composed of several teeth in various stages of development. The cavity did not appear to contain any oily or fatty substance, as in some of the cavities of the before-mentioned case, nor were there any evidences of hairs. The mass was fairly easily detached into nine pieces. One was almost a perfect molar tooth, being two and an eighth inches long, and having grooves on the external surface like the normal molars. At the end which would correspond to the wearing surface in the ordinary condition, the infolding of the enamel was well shown. Six of the other pieces, one of which was bent upon itself, all bore more or less resemblance to molar teeth, the smallest of them being one and a quarter inches in length. The three usual dental constituents, enamel, dentine, and crusta petrosa, appeared to enter into the composition of the teeth.

The posterior extremity of the testicle was composed of a cyst having a wall chiefly composed of plates of bone and cartilage. Inside this cavity were two smaller ones, one of which contained a coil of hair, black in colour, and mixed with the *débris* usually found in these cases.

The other testicle removed from this cryptorchid was small, and of a similar shape to what retained testicles generally are.

References.—Surgical Diseases of the Ovaries—J. Bland Sutton; System of Gynecology—Playfair and Allbutt; Veterinary Surgery—Möller; London Royal Medical and Chirurgical Transactions, Vol. XLVII.—Article on Origin, Structure, and mode of Development of Cystic Tumours of the Ovary—Wilson Fox; Principles and Practice of Veterinary Surgery—W. Williams; General Pathological Anatomy—Ziegler; Clinical Veterinary Medicine and Surgery—Cadiot and Dollar.

PARASITES IN NEW ZEALAND LIVE STOCK (ESPECIALLY SHEEP).[1]

BY J. A. GILRUTH, M.R.C.V.S., CHIEF VETERINARIAN TO NEW ZEALAND GOVERNMENT.

MR. GILRUTH commenced by apologising to the members of the Society for not having had sufficient leisure at his disposal since his arrival in Great Britain to prepare a paper, but trusted that the few remarks he had to make would prove none the less interesting to his audience. Continuing, he said: The chief disease amongst sheep in the colony at the time of my arrival there was undoubtedly parasitic in nature; most of the common varieties of internal parasites being found, especially amongst yearling sheep during the winter months. There are in all about eleven parasites affecting the internal economy of sheep in the colony, but in my experience very few of these are productive of serious inconvenience to the animal. Let me briefly take these in order from the nasal chambers backward.

1. The Larvæ of the *Œstrus ovis*.—These are found very frequently all over the country, but chiefly, as may be expected, near butts of timber. With the exception of the period when the fly deposits the eggs, and when the young larvæ are making their way up the nostril, no trouble ensues, and even then the inconvenience on the whole is but slight. I have found inhalations of no avail and nasal injections of medicine of little value. Frequently farmers and shepherds assert that the adult larvæ penetrate the brain, but this erroneous conclusion arises from the discovery of the parasites in the cranium after the skull has been split open by a hatchet, which has driven the parasite through the bony covering.

Strongylus filaria is occasionally found in the bronchial tubes of young sheep, and was formerly to be found in almost 90 per cent. of the hoggets during winter in the North Island.

Not only do they set up verminous bronchitis by their irritating presence, but by occluding the bronchii they cause collapse of the air vesicles behind, and thus a great part of the lung may be prevented from exercising its function, and undergo a state of collapse, the animal dying of suffocation. On post-mortem examinations collapsed portions are seen as dark blue-coloured patches on the outer surface. Most young sheep were affected with lung-worm. It was at that time difficult to find one living in North Island which, if carefully examined, did not show at least a few of these parasites, but it was only when they became numerous that the host experienced inconvenience.

Strongylus ovis pulmonalis is very common, and is found encysted in the lung, forming small nodules about the size of a grain, the most common seat being just underneath the pleura, but as these lesions are found chiefly in older sheep, and never, so far as I am aware, of a serious nature, their presence is of little importance.

Amphistoma conicum is the chief parasite of the first three stomachs of ruminants, and is common. So far as I can ascertain, no pathological results of importance accompany its presence.

Strongylus contortus, the red-worm, "striped like a barber's pole," is undoubtedly the most dangerous of internal parasites of sheep in the colony. To ascertain if this parasite be present the true stomach should

[1] Read at a meeting of the Central Veterinary Medical Association on March 7th, 1901.

be opened carefully along the lesser curvature, and the contents allowed to settle quietly, when, if present to any extent, these parasites will be seen disturbing the liquid by their wriggling or snake-like movements. In aggravated cases thousands may be seen in the stomach of one animal. A few may be seen in the stomach of almost any sheep during winter, but they occur more especially in the young and the debilitated old.

Strongylus cervicornis.—This parasite is fairly common in the stomachs of sheep in certain districts, but so far as I have observed, does not cause any serious disturbance in sheep. In young cattle, however, I have found it producing very serious disturbance, as I have recently described in *The Veterinarian*. To Professor M'Fadyean belongs the honour of having discovered and described this parasite, a full description of which may be found in *The Journal of Comparative Pathology*.

Strongylus filicollis, or thread-worm, though found in considerable numbers in some cases, never appears to cause serious results. I have found them infesting the intestines of sheep in good condition, and which certainly did not die from parasitic invasion.

Œsophagostoma Columbianum.—This parasite, described by Professor Curtice, is occasionally found, but rarely causes much inconvenience.

Tænia expansa, or common tape-worm of sheep, is considered in certain districts to be the chief cause of hogget mortality, but although they may be numerous in animals dying from exhaustion and anæmia, yet the fact that many fat lambs at the freezing-works, on being opened, are found to contain yards of tapeworm segments shows that, though they certainly live at the expense of the animal's economy, they cannot be solely the cause of serious loss.

Tricocephalus affinis, or "whip-worm," is found in the cæcum of nearly every sheep in the colony, but never in great numbers, even when other parasites may be numerous. Though losses have been attributed to its presence, I have no reason to believe serious effects are ever produced.

Cysticercus tenuicollis.—This is the intermediary stage of *Tænia marginata*, one of the tape-worms of the dog. It consists of a long, slender-necked, watery cyst, which may be found attached to the mesentery of 90 per cent. of the sheep killed in the colony. It may also affect the substance of the liver and lung, but though experimentally serious results have been produced by sudden and rapid infection of the liver, no similar effects have been noticed under ordinary conditions.

Cysticercus veterinorum.—This is undoubtedly the most frequent and the most uniformly distributed parasite. In nearly every adult animal it is to be found in the liver or lung, or both, while I have found it in the throat and crural regions and elsewhere. Very frequently clusters of these parasites, degenerated, caseated, and calcified, are mistaken for tubercular lesions, which they closely resemble. They may be readily distinguished, however, by the presence of the cyst wall in the case of the degenerated hydatid cysts.

Distomata.—A few isolated cases of these have come under my notice, but, showing no inclination to spread their presence, is of little moment. It is of interest to note, however, that the small *Limiæsis trunculata* is not present in the colony, so that some other similar species must be the intermediary host of the parasite.

The parasites of the lung and stomach being then the most injurious, it was necessary to ascertain some means whereby their ravages might be

checked, but more especially in what manner their invasion might be prevented. Before doing this, however, a careful consideration of the conditions necessary to the life of these parasites, both within and without the body, and, in a word, the predisposing causes of helminthiasis (if any) in sheep will be interesting.

The predisposing causes of parasitic invasion (and in this sense the words are used as applicable to New Zealand) are both constitutional and environmental, but as these are in a general sense interdependent on one another it is impossible to retain a distinction. The direct predisposing causes are never in operation singly, although they may as a rule be derived from a single more remote cause. The chief of these predisposing causes in operation in the colony then were :—

1. The presence of a parasite in the pasture or water in some form or other, which is a *sine qua non*. Yet though these parasites may be present, both in the pasturage (including water) and in the animal economy, it does not necessarily follow that the sheep may succumb, or even be deleteriously affected to any apparent extent by their presence. This is self-evident to all who have had the care of sheep, as example the superior resisting power of wethers living where hoggets are badly affected ; also the presence in many cases of specimens of those worms in fat sheep slaughtered for human consumption.

2. Stagnant drinking water.—It is a well-known fact that all the lower forms of plants and animals thrive under such a condition, which is their natural habitat.

3. Weakness of the sheep.—Any animal whose health is allowed to undergo the condition known as physiological degeneration is by that fact predisposed to any disease of a specific or parasitic nature. This law applies alike to man and the lower animals. It is a question of the survival of the strongest, the weakest going to the wall. Under this class young animals may be placed, as they do not possess the power of resistance enjoyed by the elder. It is an accepted fact that such is the case, but especially in sheep during the first year of their existence. They have a double function to perform with their digestive and elaborative system ; not only have they to consume the food and energy necessary to repair their ordinary waste of tissue and energy, but they require to grow—that is, build up tissue and store energy. Well-bred long-wooled sheep attain maturity early, and thus an extra tax is thrown upon their systems.

4. Swampy undrained lands.—This applies as in the last cause, with this addition, that in these pastures relatively coarse and less nutritious grasses only can grow, and even then of a lower feeding standard than the same variety of grasses grown on good well-drained soil ; this tends to weaken the animal partaking of such food.

5. Districts with an excessive rainfall and very wet seasons.—This factor is especially well experienced in New Zealand, as it constitutes one of the reasons (though not the sole reason, nor perhaps the most important) why South Island hoggets are so much healthier than those of the North, and it is well known there is a much smaller mortality during dry seasons in comparison with wet. What are the reasons for the great difference in health of hoggets during wet years and dry years? The dry weather is hostile to some extent to the parasites, but to a limited extent, judging from what we know of their resisting powers, and also from the fact that they may be found in the sheep, but so few as to have no apparent evil

effect, or very little. In wet weather, such as that experienced in the North Island during certain winters, where it is accompanied by a mildness of climate such as to make the grass grow in spite of the time of the year, the fact that the sheep would do far better in a drier and colder climate, even with a scarcity of feed, is not always appreciated. Sheep are naturally the inhabitants of the dry cold climate of mountainous regions; their whole animal economy is suited to such a life. Any practical shepherd of experience with ewes at the period of lambing knows that a raw wet day is more trying to the newly-born lamb than a cold frosty day with the temperature below freezing-point. Again, experiment has proved repeatedly that extremes of temperature can best be withstood by organic life when moisture is absent. The reasons are obvious. In regard to young sheep, the excessive rainfall soaks the fleece; so long as this is not so the animal suffers very little inconvenience. It is probable that during such wet winters the wool of young sheep is never dry. The result is a "wet blanket," tending to diminish the temperature of the body, which loss of heat has to be made up from the food, or the animal will ultimately pine away. But the condition of the food is not such as to replace the energy lost through the skin. The animal's only food sometimes consists of wet, "sour," comparatively innutritious grass, with a poor supply of fat and muscle-forming elements. An extra bulk of this material has to be digested, but, before even the process of digestion can take place, the mass has to be raised to the temperature of the surrounding body, which is another relatively needless expenditure of energy. Such conditions of food, again, set up increased peristaltic action of the bowels, *i.e.*, diarrhœa commences, and much of the food is passed through in an undigested condition.

6. Poor quality of soil, innutritious grasses, tussocky nature of good grasses, &c.—All these tend to weaken the animal through not obtaining the necessary quantity of alimentation. Under the heading of innutritious grasses comes "Yorkshire fog," *Holcus mollis*, a native of wet and swampy districts. It is a vile weed, and one that is ever increasing in the North Island. Many grasses when they become tussocky are nearly useless, because of their indigestibility; the most typical example of this kind of grass is *Dactylis glomerata* or "Cocksfoot." I have seen paddocks rendered practically useless by the overgrowth of this grass, which is good if kept in its place—an inch or two long; if longer, it tends to become stringy and hard.

7. Want of care in weaning.—In many cases the only difference weaning meant to lambs was that, instead of being assisted by the ewe's milk, the lamb had to make the best of its way on the same (probably scanty or innutritious) pasture as before, minus the heat and food from the mother. It is always desirable to wean lambs on to good food, either young grass or new green food; not to put them amongst such feed and leave them for a week or two, but to shift occasionally.

8. Deficiency in quantity or quality of milk in the mother-ewe.—Previous to weaning time, lambs often present an unhealthy appearance, some scouring considerably. In such cases it will be frequently found that if the lamb has not been "mismothered," to use a shepherd's phrase, during docking or shearing, the mother is almost dry, or, at all events, has a poor supply of milk. If the latter is general in the flock, resulting from no apparent disease of the udder, it will be, as a rule, found to arise from the nature of the food. I have carefully examined flocks of ewes with

lambs suckling, and found 20 per cent. to be completely dry, 60 per cent. almost dry, and the remaining percentage but medium milkers. There was no disease of the ewes or of the lambs. The evident cause was the pasturage, consisting almost solely of "Yorkshire fog," which is not generally considered to possess milk-forming properties of a high order. I was led to examine the udders by the unthrifty appearance of the lambs in certain flocks, which at that time were affected with no constitutional disease, parasitic or otherwise. Needless to add, such lambs would be later on (if proper precautions were not taken in time) subject to a heavy mortality.

It is unnecessary to say that if a flock of ewes are bad milkers and on good food they should be fattened with the least possible delay.

9. Congenital weakness and predisposition to disease.—There is no doubt, and the fact has now been fully appreciated by our best and most careful sheep-owners, that the system of breeding carried on in the colony had seriously affected the constitution of the sheep. It has been found impossible to breed solely for wool, and with fineness of staple as the chief object, with impunity. As it is impossible to have a "general purpose" cow producing the best quality of butter and of beef, so it is impossible to produce a sheep with the best quality of mutton and of wool. There is no doubt that breeding solely for wool has militated very much against the stamina of the sheep, even so much as in some cases to alter the original type. While it might have been supposed, and truly, that the success of the meat export trade would tend to cause a revulsion of feeling in regard to breeding, the good it has done in that manner has been counterbalanced by a new factor, viz., the export of the carcases of the best lambs, or rather the tendency to do so, which is now being overcome, leaving only practically the culls to breed from, more especially as it is the ewe lambs which are the fitter for freezing. Those remaining have often, during the first winter of their existence, been affected with parasites, and while many have succumbed the remainder have been irreparably weakened constitutionally. That there is as great a necessity for careful selection in regard to stamina as in regard to wool, and even greater, has in many cases been lost sight of.

18. Overstocking.—In the European countries it is accepted that too great care cannot be taken in the breeding and rearing of sheep. From the time when the young is born (where in many cases assistance is rendered) till the time of slaughter the animals receive constant care and attention, more especially, it may be said, during the first year of their existence; and can it be wondered if in the colonies a greater mortality should occur where the same attention does not pay with ordinary large flocks? Overstocking was a frequent cause of losses. Land may be overstocked with sheep and yet have a considerable growth of grass. The antipathy of horses and cattle to grass grown around their respective droppings is well known. They instinctively refuse to eat it, and if forced become nauseated. Sheep have a similar antipathy. In certain districts the ground is termed "sheep-sick," and shepherds express the condition by their saying that "sheep won't follow their own tails." It has been asserted that sheep diminish the nitrogen in the soil, but this is not proved. However, the fact that ground thickly strewn with their own droppings is obnoxious to sheep is undoubted.

PREVENTION.

In regard to the prevention of parasitic invasion amongst sheep, it will be seen from the foregoing enumeration of predisposing causes that it is necessary to eliminate each and every one as far as possible. To sum up briefly, the chief measures to be taken, and which can be employed on almost every flock, are—(1) Pure water for drinking purposes; if it is impossible to procure this the ordinary water may be rendered fairly wholesome by the addition of lime, which may be placed in waterholes, &c. (2) Salt and iron tonics, which may be given in boxes in the following proportions,—common salt 100 parts, sulphate of iron 1 part. Stock will be found rapidly to acquire a taste for this simple lick and eat it greedily. (3) Careful attention to dietary, which it is evident young stock require more than old. In wet districts and swampy lands it is necessary to provide some dry food for the hoggets and young stock in winter, either as oaten hay, grass hay, or chaff, with not too large a quantity of straw. Frequent changing of paddocks is a very necessary course for sheep, and to do this it is incumbent to divide the land as much as possible. These principles are in almost general operation in the Colony to-day, with the result that mortality from parasites is almost reduced to zero.

TREATMENT.

In cases of general parasitic invasion, nearly every anthelmintic in the pharmacopœia has been tried by the colonial farmer, and the average farmer had tried every nostrum and every medicine advised, but without success, and naturally I could not advise a continuance of a useless process. But the point of the matter is, that even if it were possible to expel every parasite from the systems of a flock of sheep, provided the animal economy were not made of itself proof against invasion, such parasites would rapidly re-enter the body through the grass and water of the contaminated pastures. This indicates clearly that anthelmintics for sheep are of little utility, comparatively speaking, provided they are not followed up by food of a more stimulating and nourishing character. My experience points strongly to this being so, and the following experiments support this:

1. Flock badly affected with lung-worm, thirty were intra-tracheally injected, and all were fed on young rape, followed by dry oats; three weeks afterwards post-mortem examination on one which had been injected revealed no lung-worm; post-mortem on one not treated, but which was coughing considerably, revealed *also* no lung-worm, but considerable signs of bronchial irritation, showing recent invasion in both lungs.

2. Hoggets consisting originally of about 1000, deaths occurred sometimes at the rate of four and five per day. During the time they were on oat and wheat stubble considerable improvement took place, but when they returned to old pasture, chiefly of weedy gasses, mortality again commenced and most of the flock were scouring considerably at the time of my visit. Post-mortem on two showed considerable numbers of parasites, especially lung and stomach worms. A hundred of the worst were drenched once with spirits of turpentine two drachms, milk (warm) one ounce, chiefly to satisfy the owner, and the whole lot afterwards fed on oats for some days, subsequently oats and chaff. After the animals acquired a taste for the dry food the mortality ceased altogether.

3. A hogget was forwarded to me from Port Albert to Hawera by an

Agricultural Society as a typical case, being in a most deplorable state. When shipped at the latter place for Auckland the animal was so weak that it had to be carried on board. During the time (five days) the animal was *en route* to Hawera, it received simply a little dry hay and clean water, and I examined it five days after arrival—although it was not expected by the owner to survive till it reached Auckland—and found it emaciated, small, stunted, and showing appearances of having recently been suffering from diarrhœa, though now fresh and keen, and gaining in strength every day, which it continued to do, ultimately being sold fat, and that without medicine of any sort. Accompanying this animal was the viscera and organs of another, containing considerable quantities of stomach-worm and lung-worm, so that the probabilities were that the live hogget had been originally affected similarly, probably aggravated by improper nutrition.

It is worth while to draw attention to the fact that each spring immediately the dry weather sets in the mortality amongst hoggets ceased, even in the most affected districts, and the miserable survivors gradually recovered and laid on flesh; also that the mortality was coincident with the wet weather.

As an experiment I bought 60 lambs, the weakest of the weak of a flock, which contained nearly every species of parasite. Arrangements were made with the owner that I would only pay for what was delivered. They were only a mile from the railway station, but the owner delivered them there in a dray, and we had to cart them from the station to the farm. I killed and examined one which was coughing very badly and showing every symptom of advanced parasitic disease. Large quantities of worms could be found in every organ, and the bronchial tubes were so full that it was difficult to understand how the animal could breathe. Another of the same lot had died a few hours before, evidently having burst one of the blood-vessels of the thorax during a fit of coughing; the lungs contained large quantities of filariæ. That was a fair sample of the lot. They were delivered at the experimental farm on the 20th June, and a few days afterwards I visited the farm for the purpose of arranging experiments; 58 out of the 60 had been delivered alive, two having died on the road, and six since arrival, which shows the condition of the animals. It was noticed that in the majority a change to a different pasture seemed to have done them good in spite of the bad weather which then prevailed. The animals were divided into four lots, and some of them were intra-tracheally injected, and another two lots were drenched with turpentine and oil, and one with an arsenic solution. Those that were treated medicinally did not do much good, but of those that were put on to the better food only one died. That was an example of treatment by feeding as against drenching. I may mention that a day or two after they were intra-tracheally injected I killed one, and with exception of a few dead worms in the larger bronchii, I could not observe that the parasites were in any way disturbed.

Again, another example. A small mob of 106 weedy lambs were purchased one May for the purpose of experiment. Unfortunately we could not get there at once, so they were put on a paddock of grass with an occasional run on green oats. For the first ten days one or two dropped off daily, but by the end of a fortnight they stopped dying and improved rapidly. Another example was a further lot of 65 lambs purchased one July, and divided into lots and subjected to different medicinal treatment. Of those that had no medicine administered none died, and the weight of

the wool was better than in any of the lots. The number of deaths in the other lots varied, but some died in all. Lots were drawn as to which should be treated one way and which the other, so that as far as was humanly possible each lot was given a fair chance. I think therefore that the experience I have endeavoured to give you as shortly as possible points strongly to the fact that the best treatment for parasites in lambs is to endeavour to strengthen the system in every possible way. Take the medicine which has evidently done the most good—arsenic. I do not know that arsenic has any effect directly. At all events I have placed the worms in arsenic solutions a good deal stronger than could be administered internally, and it did not have any effect on them. In fact I have taken most of the medicines I could lay my hands upon, and after mixing them with a pint of water, with at least which quantity of fluid medicines are naturally mixed on reaching the stomach, I have put the worms in and kept them at blood heat, with very little result or none at all. Then again, the lick that we use, and which is used to a considerable extent in this country, salt and sulphate of iron, is simply a tonic to keep up the condition of the animal. I am aware that in Cape Colony the farmer swears almost by Cooper's dip, which is an arsenical product. He mixes one part of Cooper's dip with about ten of salt, and gives each lamb about a teaspoonful once a week, and I am assured on very good authority that there are many places where they now keep sheep free from parasites, which formerly they could not do. When I was inquiring into this matter I carefully examined thousands of sheep, young and old, in all conditions, and I never found one that was absolutely free of parasites. It seems to me reasonable to assume that if the animal gets in low condition, it cannot resist the attacks of the parasite, and consequently the parasite gets ahead, so to speak. Give the animal the proper kind of food, and he will not only resist parasites, but expel them. With regard to the question of sulphate of iron and salt, I find that 1 part of sulphate of iron to 25 of salt is too great a proportion, and is apt to cause constipation. I recommend 1 part in 100 as ample.

Take the position to-day and eight years ago (and probably for several years previous to that) in the North Island, which is a country nearly as large as England; the young sheep were dying eight years ago during the winter months to the extent of from 20 to 50 per cent.—a very serious thing for a man with a large flock. To-day, so far as I am aware, there is not a man losing 5 per cent. from the same cause, and that simply because he pays more attention at weaning time and puts the animals on to better material at the beginning of winter. If he has weakly sheep he puts them on oats and endeavours to give them a little dry food, and if he is in a wet district he endeavours to sell them to some farmer in a position to treat them better. For the last three or four years the mortality from parasites has been very low indeed, and I have heard no complaints during that time.

In calves we found exactly similar conditions. I never yet found calves suffering from any internal parasitic disease when sucking the mother. The predisposing cause of parasitic disease in calves is chiefly that the farmer tries to rear them from birth, or almost so, on separated milk—not very much of that, and very often a little bit sour. We had the same parasite that Professor M'Fadyean described—the *Strongylus cervicornis*—in calves in the extreme south, and solely in the calves that the owners had endeavoured to rear on whey. They had not only been fed poorly, but

they were being pastured with really little better shelter than a wire fence. Those which were more carefully treated seemed not to be affected, although in the same district. In all parasitic diseases of young stock we find that the best treatment is to attend to feeding. Although we drench, and the drench is sometimes useful, I believe we do more harm than good to the sheep by hustling them into a shed and attempting to pour concoctions of all kinds into their stomachs, some going into the lungs and killing the animal. What possible good could it do? Some at the present day use medicines as a preventive, but I can never get any satisfaction from them as to why they do so. One or two actually give them an arsenical sheep dip. The arsenic acts as a tonic, but I do not know that there are any further results.

On the whole, those are the results at which I have arrived, given as briefly as possible, from our experience of parasitic diseases in stock.

Larvæ of *Gastrophilus equi.*—These are popularly supposed to be very harmful in the colony, although I have no reason to believe they are. Many patent medicines that are used (and every man's patent medicine in the colony gets a testimonial just the same as in this country),—I have tried these patent medicines. I have given the parasite saturated solutions and kept them alive for days in it. I kept bots alive in a saturated corrosive sublimate for three days, and then they were lively. I thought a 50 per cent. solution of nitric acid would kill them immediately, but it took two hours, while in absolute alcohol they revelled.

CEREBRO-SPINAL MENINGITIS.[1]

BY MR. JOHN WILSON, M.R.C.V.S., YARM.

MR. PRESIDENT AND GENTLEMEN,—In bringing this subject before you to-day, I cannot claim to have any definite knowledge, or to have any very definite statement to make with regard to the origin, pathology, or bacteriology of the disease in its infectious form with regard to the horse, for infectious in some instances I have found it to be.

In considering Cerebro-spinal Meningitis, I think we may, to commence with, discuss it from several standpoints.

Firstly, as a disease of a specific nature, infectious in itself, affecting one or more animals within a certain area, and also affecting those that have come in contact with any that may be suffering from or have suffered from it.

Secondly, as a disease, non-specific and non-infectious in character, caused by and due to external conditions and circumstances.

Thirdly, in cattle it has been recognised as an enzootic brought about and following poisoning by certain plants. Cases are on record where the disease occurs among calves, and due to invasion by the tubercle bacillus.

In man the disease frequently appears as an epidemic affecting a certain percentage of the population of cities, more especially where they suffer from overcrowding, as witness outbreaks within the last three or four years in Baltimore, Boston, New York. It attacks children and young people

[1] Read at a Meeting of the South Durham and North Yorkshire Veterinary Medical Association, on Friday, March 8th, 1901.

chiefly. Outbreaks are recorded in British Isles, occurring chiefly in barracks, &c.

Its onset in the horse is as a rule sudden and severe, and very often fatal, whether of the infectious or non-infectious type. It is more prevalent in mares than geldings, in fact I do not remember to have seen a case except in a mare. The patient may have been at work all day and apparently in good health, and have fed up at, say, six o'clock in the evening, and by about nine or ten same night be showing very well-marked symptoms.

The disease may be ushered in by an apparent stroke of paralysis, the animal going down suddenly and unable to rise again for some hours, or again there may be heavy breathing, sweating, and hyperæsthesia, accompanied by an amount of rigidity of the muscles of the neck, and especially of the back and fore and hind quarters, the tail being slightly elevated and tremulous. Several cases I have experienced have in the early stages been somewhat similar in regard to movement and action in being stiff, stilted, and painful, to the premonitory stage of azoturia in its milder form, but of course without any alteration in the urinary secretion. Sometimes the patient will stand pressing the head firmly against the wall or into a corner, and if removed from that position will very quickly go back to it again. The temperature quickly rises to 104° F. or 104½° F.; the pulse runs about 80 to the minute, increasing later to 100 or 110, being full and hard in its nature. The pupils are dilated and a general air of undefined distress prevails. As a rule at first the appetite is fairly well maintained.

I do not think that animals in towns are affected in any greater proportion than those in the country, neither is a pony any more exempt than a carriage or hunting mare, or as more frequently happens a carting mare.

If my memory serves me right, Professor Axe in a report upon an inquiry he made in East Anglia some fifteen or seventeen years ago, observed that all the horses were affected upon a certain place, the disease being recognised as of a specific nature, and that dogs that had eaten of the flesh of an animal that had died of the disease also suffered in consequence.

The disease occurs more frequently in early spring, during the prevalence of cold easterly winds, and affects horses that are not very well kept, but have to work hard. I have met with it in a mare that had been washed for lice, was not properly dried, and placed in a stall opposite a badly fitting door.

When the disease has made its appearance the length of its duration varies from three or four to fifteen or twenty days according to the severity of the attack and the causes inducing it. The few cases I have had recover have suffered severely up to the third day, then the acute symptoms gradually subside, leaving the patient extremely weak.

When the acute stage lasts longer partial paralysis and exhaustion sets in, and the slings are called into requisition; but when it is necessary to sling a case of this description I found it has been fruitless. The patient seems to be as easy if well banked up with straw.

Earlier in these remarks I mentioned that cattle suffered from the disease in an enzootic form. An outbreak is recorded in *The Recueil Vétérinaire* and translated in *The Veterinary Journal*, February 1899, in which it states that a number of cattle had been fed upon green vetches, mostly in flower, and including to the extent of about one-half a specimen known as *Lathyrus climenum*, a plant generally avoided. Symptoms were

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noticed fifteen days after the stock had ceased to be fed upon those vetches. The animals were in a state of stupor, accompanied by paraplegia, difficulty in taking up food, mastication and deglutition. Amaurosis was also present, eyes wide open but no vision. The limbs eventually became completely paralysed.

The post-mortem lesions were chiefly confined to the meninges surrounding the cerebral lobes, the rachidian canal contained a large amount of reddish serosity, the ventricles also. The cerebellum and medulla presented similar appearances.

When coming to the pathology and the bacteriology of infectious cerebro-spinal meningitis in the horse, I may say I have endeavoured to obtain some information regarding it first hand, but have been unable to do so. To quote from Friedberger and Fröhner, "The pathology of the spinal cord and spinal meninges is still very imperfectly known in veterinary medicine. Observations on this monological group are rare and much less precise than in human medicine." The disease appears to commence in the membranes, namely, the dura mater and pia mater, the process speedily passing from the pia mater to the cerebral and spinal cortex, owing to the very intimate connection existing between the vessels of the pia mater and its immediate cortex. In some instances it appears from the symptoms that the lesions are located in the spine alone and extend no further, while in others both cerebral and spinal lesions are present.

The morbid changes observable after death are definite as a rule. They consist in congestion of the vessels of the pia mater and dura mater of the spine and cerebral hemispheres, with inflammatory exudation into the sub-arachnoid cavity and ventricles of the brain, the exudate being of a brownish nature generally, having the appearance of serum mixed with broken-up blood. The cord itself may be chiefly affected, as was shown by a post-mortem specimen I introduced at the March meeting of this Association two years ago. It was reduced to the condition of cream, that condition existing from the anterior dorsal region posteriorly to the sacral. This mare was seized on the evening of the 23rd of February, was put into slings on the 28th, and died on the 9th March. I have also found the lungs and pleura extensively congested, the process being of a passive and secondary nature. The kidneys have also been altered and changed to a light clayish colour, as also the muscles of the loins and quarters. On one occasion I observed that the mare, three days before she died, suffered from an acute attack of what seemed to resemble lymphangitis, but at the same time she was suffering from partial paraplegia.

As affecting the human subject, I should like to refer to an excellent lecture published in *The Lancet*, June 24th, 1899, by Dr. Osler, of Baltimore. He describes an organism found in the cerebro-spinal exudate and rarely elsewhere in the body, recognised as the meningococcus or diplococcus intracellularis meningitidis. It has been isolated from the blood and lungs. It is transportable by atmospheric currents even when of a feeble nature. This organism is feebly pathogenic for animals, but Heubues, in Germany, in 1891 and 1897, Councilman, and others have produced a typical meningitis by inoculating cultures of this meningococcus beneath the spinal membrane of goats.

With regard to treatment, I always have the patient placed in a box and away from the others the first thing, and kept as quiet as possible. Give a full dose of physic and warm enemas. Apply hot blankets covered

with mackintosh along the spine, and follow up with sedatives. I have found bromide of potassium to give the best results, varied with belladonna and morphia. But the continued application of hot blankets sprinkled with turpentine to the spine has the most beneficial action. Frequently, of course, it is found necessary to pass the catheter.

It is sometimes essential to place the patient in slings, but, as I have remarked previously, the prognosis in a case of this description must be of a very grave nature. During the time that I was a student and acting as clinical, there seemed to be an epidemic of this disease in London, and consequently I had good opportunities of observing it. After a time the authorities at the College abandoned the practice of slinging a patient. The percentage of recoveries, I should say, will not be more than at the rate of 40 or 50 per cent.

After an animal has recovered, there is considerable debility and weakness along the spine, and, to a small extent, loss of co-ordination of movement, with atrophy of the dorsal muscles and those of the iliac region. In those cases I apply a charge containing a small quantity of pulv. canth. to the loins, and administer small doses of nux vomica night and morning with ferri sulph., and after a fortnight has elapsed turn the patient off for a run at grass for two months or so.

In the human subject the percentage of deaths is much higher than with us. The treatment is somewhat similar. Puncture of the second lumbar interspace and irrigation of the cord is now practised, but the results so far are not very encouraging, organic change in the tissue of the spinal cord occurring very quickly.

SOME FETLOCK LAMENESSES.[1]

BY W. HUNTING, F.R.C.V.S.

The three conditions affecting the fetlock to which I desire to limit my remarks to-day are:—

Sprain of the joint ligaments.
Bruise of the joint.
Ostitis of the head of the pastern bone.

My experience leads me to believe that lameness affecting the fetlock joint is comparatively uncommon. I think perhaps it is a little more frequently present than diagnosed. When we think of the position of the fetlock it is really wonderful that it escapes evident injury as much as it does. Forming the joint at which the perpendicular of the limb is altered to the oblique, one might well anticipate frequent sprain. Its position renders it liable to accidental contusion, and it is often the seat of interference from the opposite foot. Then it is affected by shoeing. One side of the hoof is sometimes lower than the other, one side of the shoe is occasionally made thicker than the other and this irregularity of the base of the limb one would imagine to be a strong predisposing clause of strain on the fetlock joint. My experience does not bear out the correctness of these theoretical anticipations. On the contrary, I diagnose few fetlock

[1] Read at the meeting of the Midland Veterinary Medical Association at Wolverhampton.

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lamenesses. When I had charge of coal mine studs I saw a number of cases of sprained fetlock in the ponies who brought the tubs of coal from the face of the workings. The weight was heavy and the surface of the roadway was slippery. I have been told that small mules and light horses on tramways suffer from fetlock sprains. Want of personal experience leaves me merely to note that the conditions are somewhat the same as were found in the case of the pit ponies—heavy loads to start and slippery roadway on which to do it.

Sprains of the fetlock do occur, and I speak now not of those sprains affecting the mechanism at the back of the joint, including the sessamoids, but of the sprains injuring the lateral and capsular ligaments only. Such sprains are seldom very serious, and soundness may be expected to return in two or three weeks if properly treated. Of course the duration of the lameness is in duration to the amount of injury done to the tissues, and also is affected by the tone and healthiness of the animal. As the result of a very violent sprain or of repeated sprains we may have a large amount of swelling and some fibroid ankylosis resulting.

The ordinary sprain is detected by the local swelling, pain on pressure, and passive motion of the joint. Without these local symptoms I do not think it possible to be guided in a diagnosis by the action or position of a limb. The fetlock joint is flexed in nearly every painful lameness of the limb when the horse is standing. The action in fetlock lameness is the same as when any of the lower phalangeal joints or the foot are affected by a painful lameness.

With the exception of fibroid ankylosis I know no bad sequelæ to a sprain of the fetlock. I have never seen permanent articular change or bony ankylosis to follow.

The treatment of a sprained fetlock is perhaps a controversial subject. Some rely on hot or cold fomentations, followed by a blister, rest being strictly enforced.

I have quite discarded this line in favour of cotton wool and bandaging. Rest I only advise for a day or two, and then adopt progressive slow exercise. By this I mean that the first time the horse is led out he only limps along for five or six minutes. Then next day, if no worse, he does similar exercise twice in the day. Then he doubles the time, and so gradually increases the time of his walk until it covers half-an-hour, when I let him have one turn a day of one hour.

I use no blisters, but instead cold ablutions for a few minutes followed by hand rubbing till dry. I always order hand rubbing in the direction of the hair with a firm slow motion of both hands. This treatment has given me much greater satisfaction than the fomentation and blistering which I employed for many years in similar cases.

Bruises on the fetlock are usually the result of injury caused by the other foot when horses "cut" or "interfere." I have never noticed any arthritic disease set up by these contusions, even when they caused very large and firm swellings on the inside of the joint. By continued repetition these enlargements may become permanent and the surest way to fix them is to blister them. Pressure by means of cotton wool and a bandage will facilitate the absorption of swelling due to bruise more than any other treatment I have tried.

Now I come to the third kind of fetlock lameness I desire to bring before you. I have referred to sprain and bruise only as introductory to

this. These two conditions *may* give rise to periostitis and so cause the formation of exostosis. I think such result is extremely uncommon—at any rate my experience of sprain and bruise of the fetlock does not include a single case when either exostosis on the pastern or articular lesions in the joint followed directly as an effect.

Bony deposits on the surface of the large pastern are not uncommon. In London they are regularly recognised as "cab-horse disease." The condition is not confined to cab horses but it is most frequent in them—probably from the constant wear and tear of their prolonged and rapid work. The small bony enlargements I refer to are easily felt on the inner or outer part of the head of the os suffraginis. In the early stages, when the extostoses are small, very careful examination is necessary to detect them. Unfortunately the lameness does not follow well-developed exostosis but precedes all enlargement, and so there is a time in this lameness when nothing is to be seen or felt about the fetlock. I incline to believe that such lameness is seldom diagnosed by any of us. Action affords no assistance. Position of the limb is not indicative. No pain is elicited by pressure or movement of the joint. The case might be a commencing ringbone or a hidden splint.

Lameness is at first slight and passes off with rest. It easily recurs on work and again subsides with treatment. It is only after a week or two of lameness that small enlargements are detected on the side of the fetlock, and then we know what and where the seat of lameness is. The condition is one not very amenable to treatment; it taxes the patience of the owner, and a permanent cure requires such a cessation of work as to render probable success not worth attempting unless the horse is of value.

I used to think these cases were the result of periostitis following external injury, but the careful observations of my friend Mr. W. Willis, M.R.C.V.S., have altered my opinion. He has followed his cases to a post-mortem examination, and I think placed on a firm scientific basis the nature of the lameness.

From my friend Mr. Wm. Shaw I have also obtained important information and the loan of a number of specimens he has secured at the slaughter-house. These and many more were collected in a few weeks. They have, unfortunately, no history, but they bear out exactly the observations Mr. Willis has made on the living and the dead subject.

An examination of these specimens shows that in no case where exostosis exists on the face of the bone is the articular surface sound. In some cases articular mischief is visible and yet no exostosis. These conditions, considered with the history of living cases—that the lameness precedes the enlargements—strongly suggests that the exostoses are secondary to some change in the bone. In fact we have an ostitis of the os suffraginis accompanied by pain and lameness, which, as it develops and progresses, causes periostitis and articular degenerations. It is worthy of note that the articular surface of the metacarpal bone is not affected nor is its outer surface changed by any exostosis. If the mischief commenced in the joint one would expect both bones to be affected. In more than one respect this disease of the head of the large pastern bone resembles the better known navicular disease.

In both the changes are slow, in both periostitis occurs later, and we find small exostoses, in both there is a liability to necrotic change and a danger of fracture as a complication. In the bones before you will be

found lesions of varying degree. Some show small necrotic spots, some larger excavations. In others there are cracks or fissures varying in depth; and in a few distinct fractures in which repair has been attempted.

I have little more to add. It seems clear that, as in spavin and navicular disease, and probably in ringbone, the first morbid condition is an ostitis—the articular and periosteal changes following directly from the extension of the inflammation.

Treatment to be successful requires early detection of the disease and prolonged rest. If the exciting cause is the concussion from work we may expect the cessation of the cause to be followed by recovery. But some of the articular changes are not such as we can expect ever to end in real recovery, and therefore a marked case is probably incurable.

Neurectomy may be tried, not metacarpal, for it is useless for fetlock disease, but median neurectomy. In some cases it is successful, in others it is soon followed by fracture of the pastern. The inflammation of bone of course continues after neurectomy, and as the density of the bone is altered fracture is likely to occur.

As a rule the larger the ossific deposit on the surface of the bone the greater the articular lesions, and so a fair practical rule is to anticipate fracture more certainly as a sequel when the exostoses are large.

This is a short paper, but I think it contains matter worthy of notice. I lay no claim to any discovery—I am only voicing the work done by others—by Mr. Willis and Mr. Shaw.

SOME OF THE DISEASES OF THE SO-CALLED POINT OF THE HOCK.[1]

ADDRESS BY PROFESSOR PRITCHARD.

At the outset Professor Pritchard reminded his hearers of the structures composing the so-called point of the hock. The basement part of it, he said, was the calcis, which corresponded to the heel bone of man, and intimately connected with it were the great tendons of the large muscles at the back of the thigh, viz., the gastrocnemius externus and the gastrocnemius internus, the tendon of one to an extent winding round that of the other. He had never seen it in print, nor heard any one attempt to explain why it should be so, but his idea was that by the twisting partly around of the two tendons their strength or power of resistance was considerably increased. The gastrocnemius internus wound round the gastrocnemius externus, the first named forming a tendinous cap to the point of the bone and it was firmly held there by strong ligaments, one on either side, which were fixed up in such a manner as to allow that cap to move upwards and downwards, while the other tendon, the external one, became fixed, and ended at the point of the calcis. The internus, after forming the cap, passed down the back of the leg and formed the tendon, which was most superficially placed, the perforatus. Between the cap formed by the gastrocnemius internus tendon and the point of the calcis there was a large and important synovial bursa. Externally to the structures of which he had spoken was the common integument, but between the latter and the

[1] Delivered at the Quarterly Meeting of the Lancashire Veterinary Medical Association on April 4th, 1901.

external surface of the cap of the gastrocnemius internus was a portion of connective tissue, formerly termed cellular tissue. This connective tissue was present in every structure of the body, although it differed in different parts of the body, *e.g.* the connective tissue in the substance of the lungs was particularly fine, while in other parts of the body it was absolutely coarse. The material at the point of the hock between the common integument and the gastrocnemius internus was especially coarse—in other words the bundles of fibres were large, and the spaces between them were large, while the quantity of secretion was larger than where the connective tissue was fine.

What was a capped hock? An examination of the point of the hock in health would show that the connective tissue was coarse, the spaces large, and that the portion of connective tissue secreted rather a large quantity of fluid, which, if carefully examined, was a little more albuminoid than that generally secreted. When an injury happened to the point of the hock (and an injury was the principal, but not the only cause) such an amount of congestion and inflammation was set up that the structure of the connective tissue was to an extent destroyed, and a sac was formed. That, in a few words, was a capped hock. The principal cause being an injury, how was that inflicted. After reading works on the subject, his conclusion was that the writers of those works were under the impression that the animal more frequently inflicted the injury by kicking. He had not the slightest doubt that a capped hock was produced by kicking, or an injury to the point of the hock. It was generally described that in the examination of a horse for soundness, a considerable amount of doubt was entertained, if it was found that the animal had a capped hock, that it was an indication that the animal was in the habit of kicking in harness. He, however, thought that when an animal capped its hock from kicking in harness there would be associated with it an abrasion, which though small, was usually above or at the upper part of the enlargement. While he would certainly counsel veterinarians to have their suspicions should the animal have a capped hock, he would not go to the length of those who considered that in the majority of instances a capped hock was produced by an animal kicking, because he was of opinion that it was more frequently produced (and this opinion he left open to argument) when the animal was bringing its hocks in contact with the ground in the stable in the act of getting up and not when lying down. The horse puts out its fore legs, then its body goes forward, and it springs on to its feet from the hocks, and this is when the injury was caused, and not when lying down, as a great many believed.

While it was no doubt produced in the majority of cases by injury, there were other causes, such as the result of illness. Certain maladies affected an animal's system which gave rise to swelling of the legs and of different parts of the body, and the hocks were no exception. Capped hock could be got as a consequence of influenza, also from a low condition of fever arising from any cause, but in these instances it was probably not so absolutely pointed, the swelling in fact was not so confined to the hock as it would be when produced by an injury.

As to the symptoms he need not say anything, because any veterinarian with half an eye could detect a case of capped hock, but there was something to be said about the treatment, and he wanted to learn something respecting this. One law to be laid down with regard to treatment was to

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do away with the repetition of the cause. There could not be two opinions about that. An animal must be stopped from lying down if that were the cause of the capped hock, or if produced by kicking the stall-post, that must be prevented from taking place. If not, all the other treatment was absolutely useless. It often happened that the groom or attendant leaves the horse in perfect health last thing at night and finds it next morning with a capped hock the size of an orange, so that it did not take long to produce. Under such circumstances a dose of purgative medicine ought to be at once administered and fomentations applied. That was his idea of the manner in which a case of capped hock should be treated; provided, of course, that the veterinary surgeon was called in in the first instance. But if the time had gone by for that kind of treatment, and instead of finding an inflamed enlargement there was one which was cool, that treatment would be absolutely of little or no use. The animal should be kept tied up, and in regard to this suggestion he knew the difficulty they experienced with their clients about keeping the animals tied up for a long time. He did not know whether the horses now in South Africa were allowed to lie down, but he knew that during the Crimean War the horses were not allowed to lie down from the time of leaving England to the time they returned. Bearing in mind the arrangements of the ligaments of the knee and hock, a horse is almost as capable of standing as a fowl could stand on one leg, so that it would not do for veterinarians to be alarmed, or to be talked over by their clients that they were acting cruelly to the horses by compelling them to stand. Instead of applying warm water, he should apply cold, and plenty of manipulation of the hand. If that were insufficient to reduce the enlargement, there were various remedies, such as sweating, blisters, stimulating dressings of all kinds applied until the skin became sore, or until an amount of scurf was raised and then discontinued and afterwards repeated.

A more potent treatment he had frequently had recourse to was the application of biniodide of mercury 1 to 8. If he had a valuable horse of his own where the inflammatory symptoms had subsided and the parts cool, he should apply biniodide of mercury 1 to 8, and if not satisfied with one application, he would apply it three days consecutively. The object of applying it three days was, in his opinion, that a scurf or scab would unquestionably be raised on the first application, but if applied three days, such an amount of scurf would be produced on the surface of the enlargement as to impart an amount of pressure that would be better than any bandage that could be placed on it.

Another treatment was puncturing the sac and liberating the fluid. This he could advise if they had got their own animal. His opinion was that, however they operated—whether with one kind of syringe or another—they would have cases occasionally where they would lose the horse as a consequence of the extensive inflammation set up.

Passing on from that to a more serious condition met with in connection with the point of the hock. As previously stated, the gastrocnemius internus tendon passed over the point of the calcis, and there was a very large and important bursa, a synovial bursa, and from injury imparted, but more frequently from extraordinary exertion, inflammation was set up in that bursa. He should have said with regard to the capped hock of which he had been speaking that it had been unattended with lameness. The enlargement is very slight compared with the capped hock of which he had

been speaking, and, instead of its approaching directly from the point of the hock, it would be found more laterally placed. There was a considerable amount of heat and pain on pressure, and it is attended with lameness. In these circumstances he would at once have recourse to antiphlogistic treatment, and, so soon as the inflammation was reduced, apply severe blisters.

Many serious consequences result from this injury, amongst which would be met ulceration of the fibre of the cartilage and the tendon of the gastrocnemius externus, the one attached to the point of the hock, and in these cases the lameness would be of a chronic character.

It would be found that writers describe two cases of capped hock—one is spoken of as a disease affecting the subcutaneous tissue, the other the inflamed condition of this bursa—but capped hock applied to this condition of bursa to which he had alluded was in his opinion a misnomer. Although enlarged, it was enlarged laterally, and was nothing like a capped hock.

Passing from that, he reminded them that the gastrocnemius internus was attached to the point of the calcis by strong ligaments, one on either side, which were so arranged as to allow the gastrocnemius cap of the tendon to move upwards or downwards over the point of the calcis. Luckily for them and their patients, the rupture of one of those lateral ligaments did not frequently happen, for if it did there was no recovery. Of course ligaments could be ruptured—in fact, it was no uncommon circumstance to divide a ligament or a tendon in the fore or hind limb—alluding to the operation of tenotomy, where they divided the flexor tendons below the knee or below the hock—and they knew that these would be united by a portion of new tissue intervening between the two extremities, and the animal recovered sound action and did work for years after. Therefore the want of success in dealing with a case of a rupture of one of these bands of ligament was not due to an incapability of nature to bring about a recovery, but to the fact that the passive contractility of the muscle keeps the cap out of its place. They of course knew what passive contractility meant. However a person might be asleep, the whole of the voluntary muscles of the body were in action—a constant resistance was going on between one set of muscles and the other. The passive contractility of the muscle of the gastrocnemius internus tendon pulled it out of its place immediately the resistance is lost from a rupture of this ligament, and, however it might be bandaged, the cap cannot be got back into its place and retained there.

Professor Pritchard concluded his discourse by a reference to accidents to the epiphysis of the calcis, which sometimes occurred in young animals.

DISCUSSION ON PROFESSOR PRITCHARD'S ADDRESS.

Mr. TAYLOR, after complimenting the Professor on his continued juvenility, confessed that, with regard to capped hock, which had just been so ably explained, he had been conversant with the lecturer's views when at college as to true-capped hock and so-called spurious bursitis of the bursa situated between the two tendons and the point of the os calcis. He, however, came with the hope of gathering knowledge, and more particularly respecting the treatment of capped hock, for, however good a horse might be, especially of a lighter breed, it interfered not only with its value but appearance. He had experienced great difficulty in treating cases of

chronic capped hock, and in respect of these he had long been, and was still, of opinion that if pressure could be brought to bear upon the capped hock it could be reduced, if not entirely, certainly to a decided minimum. In some instances he had managed to reduce it by the aid of blisters and an elastic bandage. Professor Pritchard had not stated whether he had point fired the point of a capped hock, and if he would agree to such treatment. Another interesting pathological condition of the capped hock was rupture of the lateral ligament attaching the gastrocnemius internus tendon to the os calcis. This he had seen in two or three cases, in all of which he gave it as his opinion that the animals would never recover, and so it turned out.

Mr. WOLSTENHOLME said, so far as his experience went, he should incline to what the Professor had stated respecting the cause of capped hock, viz., that in the majority of cases it had nothing whatever to do with kicking in harness, for many of the quietest horses were troubled with capped hock caused by rubbing in the boskins, or kicking, or in lying down. Chronic capped hock was a condition which personally he did not care to tackle, because there was little in the way of credit or profit to be got out of it, but he had tackled one or two very serious cases by the aid of setons. If they would seton one, he did not care of how long standing it was, and put up with the great swelling which immediately followed, they would have a perfect cure in the end. But it would be six months before the enlarged hard hock commenced to become smaller, after which time it would gradually become less, and in twelve or eighteen months it would be as fine as the other. With regard to the other points he had very little to say except as to the rupture of the epiphysis. He thought they had a cause for complaint against the professors of veterinary surgery. With all the resources of the colleges, he did think they were not bold enough nor enterprising enough in matters of equine and bovine surgery. One of his first attempts at fracture of the higher part of the limb was shortly after his leaving college. A colt some months old had a fractured femur, considerably above the stifle. He did some bandaging to fix the hock and lower part of the limb, did not move the colt from the field in which he found it, but fenced it in with hurdles and had it fed over the front one. The colt stayed thus for three weeks or a month and made a good recovery, in which there was very little shortening of the limb.

Mr. WOODS said it was news to him that capped hocks were usually due to horses kicking in harness, as he thought it was generally agreed that it was produced in the stable. While agreeing that it was often produced in the horse getting up, it was also produced by the animal kicking the stall-post. As to the Professor's treatment of true capped hocks of a horse injured at night, he was somewhat doubtful whether the cure was not worse than the disease, theoretically, because it was well known that the horse could lock its joints almost like a bird. Horses that never lay down fell in their sleep, and it would be found in practice that if they had to be worked they would not be as fresh as those which had lain down. A simpler treatment was Shepherd's hock truss. Capped hock from kicking the stall-post was quite a different thing to a night-kicker. He had known a night-kicker stop its night-kicking when a light had been left in the stable, thus preventing the animal capping his hocks. He entirely agreed with the Professor respecting the synovial capped hock being a very serious matter. As to chronic capped hocks, he was not fond of operations in

those cases, but one of the best practitioners he knew told him that he had no hesitation whatever in taking the pyro-puncturing iron and inserting it right up the centre from below and then putting in a small portion of corrosive sublimate, and assured him that he had never had any bad effects.

Mr. LAWSON considered the capped hocks done from kicking in harness were exceptional to those done in the stable. In the latter case it was difficult to say whether the capped hock was done in getting up or in lying down, for it frequently happened that horses left all right at night had big capped hocks next morning. His greatest success in capped hocks, after adopting remedies such as hot applications, hand-rubbing, &c., was by getting a youth to simply sit on a stool by the horse. It was wonderful what an effect this had. He had never had any experience of setons in capped hocks, but his experience of setons in thoroughpins had not been very successful.

Mr. MUNRO suggested the application of nitrate of potash and chloride of ammonia in cases of capped hock produced at night, but in more chronic cases he had opened them with his scalpel.

Mr. CHORLTON asked whether it was the usual practice to open capped hocks, for some which he had seen appeared to get better without opening, while others had gone wrong with opening.

Mr. ACKROYD referred to a treatment of capped hock by pressure with a broad strong linen bandage placed round the hock in such a manner as to press upon the serous sac, which, when the hocks were flexed, burst.

Mr. EDWARDS pointed out that if the cause were not removed a recovery could not be expected. His method of stopping a kicking horse in the stable was to put a strap round the hip. He had never opened a capped hock.

Mr. STENT said he understood Professor Pritchard to say that the cause of capped hock was the horse getting up, not lying down. Considering that 99 per cent. of horses lie down, did he not think that would be the cause? As to treatment of capped hock, he had in two cases opened them. Another cause of horse-kicking was, he thought, rats gnawing them at nights.

Mr. FAULKNER considered that the more frequent cause of capped hock was stable injury, and emphasised the necessity for preventing re-injury of the hock. There were various ways of trying to accomplish that object, such as keeping the animal fastened up, the stall well padded, and a good thick bed of straw or moss litter, also to put the animal in slings. In cases of what was described as the spurious capped hock, where there was a tendency to consolidation he had applied the old-fashioned remedy of perchloride of mercury in solution dissolved in methylated spirits and boiling water added, 1 drachm in 6 ounces, with success. The other methods, such as opening, he had never seen in practice.

The PRESIDENT, alluding to horses standing, said some could stand for an indefinite period without any ill effects, while others would suffer if standing but a short time. The question therefore arose as to where to draw the line. The only plan was to forthwith put the animal in slings. As to blistering the hock great discretion had to be used in that matter. The Professor had mentioned friction. Friction judiciously applied undoubtedly worked wonders. As to aspirating a synovial capped hock he would consider very seriously before attempting that. He had, however, aspirated bog-spavins, though without success. He did not wish to say

more than that he agreed with the laws laid down by Professor Pritchard in pretty nearly every instance.

Professor PRITCHARD, in reply, said there was no doubt whatever that in almost all enlargements if pressure by means of a bandage or by rubbing could be applied equally, it would bring about an absorption without any other treatment at all. He was cognisant of the fact that to apply a bandage to a hock to impart an even amount of pressure was a most difficult matter, therefore he should advocate pressure by means of manipulation rather than by the application of a bandage. As to inserting setons and opening capped hocks, he agreed with the treatment, but there was the risk of losing the animal. Even when the treatment was adopted successfully he had seen cases where it had remained in a slight thickening as the result of the operation—a remnant of the capped hock. Respecting the capability of horses standing up for a length of time, he did not retract one syllable of what he had said in his discourse. It was all very well to say that horses would stumble in the shafts if they had been tied up. They stumbled in any case, and his opinion was that instead of the horse's muscles becoming weaker through standing, they actually became stronger. As he had told them, the horses which went out from this country to the Crimea, and lived to come back, never lay down from the time of departing to the time of return. In fact one of his own horses stood for twelve months and got fat and never stumbled. Of course there were other ways of preventing the injury. There was the necessity for preventing a repetition of the cause, putting the animal in slings, although some would not have slings. He quite agreed with Mr. Faulkner's remedy, viz., perchloride of mercury, for he had seen it used with very considerable benefit.

DISEASED MEAT IN EDINBURGH.

THE VETERINARY QUESTION.

AT a special sitting of Edinburgh Police Court on 20th June, before Sheriff Henderson, Thomas Lawrie, cattle dealer, Ferry Road, Edinburgh, was charged with being the owner of the carcase of a bullock seized in the Dead Meat Market, Ponton Street, on the 24th April, which was intended for human food.

Dr. WILLIAMSON, chief sanitary inspector, said he saw the meat immediately after seizure. The flesh was very soft and dark in colour, showing that the animal was in a feverish condition before death. The pleura had been stripped, and there were masses of tuberculous nodules on the diaphragm. The glands of the chest were very much enlarged and clearly tuberculous. Cross-examined by Mr. Guild, W.S., Dr. Williamson said that a severe illness in the eye would not account for the feverishness in the animal. He knew that a certificate by Mr. Russell, veterinary surgeon at Dunbar, from which place the carcase was consigned, accompanied the carcase; but, notwithstanding, he was of opinion that the carcase was such that to any ordinary person it was easily recognisable to be diseased. He learned that Mr. Lawrie saw the animal a day or two before its death, and he thought Mr. Lawrie would have noticed then that it was suffering from disease.

Mr. JOHN RIDDOCH, assistant sanitary inspector, and Mr. DURIE, super-

intendent of the Edinburgh Slaughter-house, corroborated as to the condition of the carcase, the latter remarking that it was the worst he had seen for many a year.

Mr. WILLIAM RUSSELL, veterinary inspector at Dunbar, was called for the defence, and stated that he had been twenty-five years at Dunbar. On the 10th April he was called to Mr. Lawrie's farm at East Pinkerton to examine this bullock. He found one of the eyes projecting from the socket—a mass of fungus. This trouble was well known. He ordered the removal of the eye or slaughter. He was called in again to examine the bullock after it had been killed. As a professional man, he made a special examination, and discovered no traces of disease. The flesh was fairly firm and well set. He noticed that the ribs had been scraped, but this was a common thing. Cross-examined by Mr. R. Macaulay Smith, witness said he did not examine the entrails, because they had been buried. He did not cut into the flesh, because he saw no reason to do so. It was never his practice to cut into the flesh. He gave the certificate although not having seen the entrails. Witness admitted that he was not a veterinary inspector approved of by the Local Authority under the new Act.

THE CARELESSNESS OF A VETERINARY INSPECTOR.

Sheriff HENDERSON said it was evident the Legislature considered that the presence of a veterinary surgeon would go a long way to show that a reasonable precaution had been taken. He had to decide now whether that veterinary surgeon must necessarily be approved by the Local Board. It was no real defence to plead ignorance of the fact that the veterinary surgeon required to be approved by the Local Board, and in respect that the provisions of the Act required the examination of a carcase by a veterinary surgeon approved by the Local Authority, he must convict. In respect, however, that the respondent had used reasonable care in getting a veterinary surgeon's certificate, he would impose no penalty. The real beginning of the whole thing was the carelessness of Mr. Russell.

GLASGOW CORPORATION AND ITS VETERINARY SURGEONS.

ON Monday, 27th May, the following discussion took place at the usual Meeting of the Corporation.

VETERINARY SURGEONS' SALARIES.

The minutes contained a recommendation that the salary of the veterinary surgeon be increased from £250 to £350 per annum, and that the salaries of two of his assistants be increased from £120 to £150 per annum.

Mr. DICK moved the approval of the minutes.

Preceptor GRAY thought it was too much of a good thing that they should have a proposal to increase the salaries of two assistants with only ten and eleven months' service. In the present state of the Health Department it would be altogether inopportune to deal with officials' salaries. That department required to be reorganised, and there should be an inquiry as to whether some of the present officers should be continued at all. They would be told the usual story about doing injustice to an

individual. He did not think there would be any chance of their veterinary surgeons running away.

Bailie W. F. ANDERSON.—Oh, yes.

Preceptor GRAY said he had never heard of a man running away from the Corporation service, or if they had they had regretted it. Corporation officials had continuous employment; they were appointed to deputations here and there, and had their holidays; they were their own masters; and when they came to not a green old age, they received half-pay on retiring. What service was there in the country like that? The duty, therefore, lay upon the Health Committee to put their house in order instead of coming forward with a proposal of that kind. He moved that the minute be delayed until the Corporation received a report from the committee on the reorganisation of the Health Department.

Mr. STEWART seconded. It was well known, he said, that at the present day the Health Department had not the confidence of the Corporation. This was not the proper time for dealing with salaries in this department.

Bailie W. F. ANDERSON supported the minutes. He stated that it was simply impossible to get or retain veterinary surgeons for such a salary as £120. With regard to the friction in the Health Department, the veterinary surgeon had nothing to do with that. The present salary was inadequate for the duties performed by the veterinary surgeons.

Mr. J. H. MARTIN moved as an amendment:—"That before agreeing to any alteration of the salaries in the Veterinary Department, the Committee on Health be requested to consider and report as to the advisability of taking over the inspection of animals under the Contagious Diseases Animals Acts." He said that some time ago he had brought this matter before the convener of the Health Committee, that an endeavour should be made to take over the inspection under the Contagious Diseases Animals Acts, but nothing had been done. He quite agreed with all that had been said in favour of Mr. Trotter. He remarked that Professor M'Call had a salary of £500 as inspector under the Contagious Diseases Animals Act, and he thought that that should be placed under Mr. Trotter and the new Veterinary Department. He had not the slightest doubt but in a short time that would be done, and therefore when they were raising salaries he did not see why this matter should not be taken over now.

Mr. BATTERSBY seconded the amendment.

After some discussion Preceptor GRAY withdrew his proposal in favour of Mr. J. H. Martin.

Mr. DICK, in closing the debate, said he repudiated the statement of Mr. Stewart that the Health Committee had lost the confidence of the Town Council.

On a division, thirty-three voted for the motion and fifteen for the amendment.

BRITISH CONGRESS ON TUBERCULOSIS.

ALTHOUGH the details of some of the functions in connection with the Congress on Tuberculosis, which is to be held in London from July 22nd to 27th, are not yet completed, a number of arrangements have already been made. The principal railway companies in Great Britain have consented to issue return tickets at a single fare and a quarter, minimum 1s. Such

tickets will be available from the day before to the day after the Congress, Sunday being considered a *dies non*. On the evening of Monday, July 22nd, the opening day of the Congress, a reception will be held by the Organising Committee in the Queen's Hall, when the Royal Engineers' band will be in attendance. On Tuesday, July 23rd, Professor Koch will address a public meeting in St. James's Hall, and in the evening a reception will be held by the Lord Mayor in the Mansion-House. On Wednesday afternoon, the 24th, Professor Brouardel, of Paris, will address a public meeting in St. James's Hall at 3 o'clock, and from 4.30 to 7 the Ladies' Reception Committee will give a garden party in the Royal Botanic Society's Gardens. On Thursday afternoon, July 25th, the Earl and Countess of Derby will give a reception, and on Friday afternoon, Sir J. Whittaker Ellis will entertain members and their friends at a river party at Richmond. On Saturday, July 26th, excursions will be arranged to sanatoria and other places of interest, and in the afternoon the Duke of Northumberland will give a garden party at Syon. The work in the various Sections will proceed from 9.30 A.M. to 2 P.M. on all days during the Congress from Tuesday to Friday inclusive. During the period of the Congress, some of the largest private houses in London with interesting collection of pictures will be thrown open to visitors.

Extracts.

FATAL CASE OF INDIGESTION CAUSED BY GORGING.

THE subject was a two-and-a-half-year-old heifer, which, after having taken at ten A.M. a feed of hay and radishes, washed down with twelves litres of water, evacuated three hours later, and then swallowed in ten minutes eighty litres of potato-mash intended for other animals. The heifer began rapidly to show signs of discomfort, became very restless, and kept pawing the ground. Her distended belly rendered her breathing short and fast, and soon walking became impossible; she remained standing with her legs stiff and wide apart, her head resting on any objects within her reach. About ten P.M. she fell over and assumed the right sterno-costal position, with her head lying over on her shoulder. She remained thus till two A.M., when the veterinary surgeon arrived. At this moment there was no great swelling, but the animal kept moaning, and was insensible to peripheric excitements; the mucosæ were injected, the temperature lowered, the pulse much accelerated. Death supervened at four o'clock, in spite of the evacuation of a certain quantity of the contents of the rumen by means of the trocar and the administration of stimulating drenches. Gastrotomy had been performed too late.

(*Le Progrès vétérinaire.*)

CANINE PIROPLASMOSIS.

MESSRS. NOCARD and ALMY were consulted about a dog which passed blood, and the owner brought some of the urine for examination. It was of the colour of coffee grounds, as in Brou's disease, and contained no red

globules; it was consequently a case of hæmoglobinuria, and not of hæmaturia. Examination of 12-15 c.cs. of blood from the thigh, in a fresh state, gave no appreciable result, though a few red globules seemed to contain small, rounded, and refringent masses. Examination after colouration with phenicated thionine showed that a small number of hæmatia contained in fact parasites analogous to those which characterise Texas fever; more minute colourations gave still more definite results; it was a case of an endoglobular hæmatozoary, or of canine piroplasmosis. The parasite appeared in the form of a small globular mass, with clearly marked outlines, with an eccentric caryosme colouring strongly by Laverdal's method. It rarely occupied the centre of the globule, but was generally close to one of the poles; it was impossible to find any pyriform ones. Generally the globule affected contained only one parasite, though here and there two, and even four, were met with in the same globule. Numbering of the globules according to Malassez's method gave only 2,800,000 red globules to the cubic millimetre.

Messrs. Nocard and Almy then learnt from the owner that a few weeks before he had taken his dog to the country duck-shooting; a short time after his return he found it covered with ticks, which he had some difficulty in clearing off. (A fine fat tick was brought by the owner and laid eggs, which were reserved for future use.) Meanwhile the disease had been given to an old bitch by injection of 5 c.cs. of diseased blood into the jugular. Three days after, temperature rose to 40·8°, and examination of the blood showed already some globules to be attacked by the parasite. A strange fact, showing that the form of the parasite varies in its stages of evolution, was that almost all the piroplasms were pear-shaped and bigeminate. There were 6,100,000 red globules to the cubic millimetre. Next day the bitch was out of sorts and downcast, and refused to eat; she had hæmoglobinuria; urine dark and albuminous too; temperature 41·3°; the hæmatogoaries were much more plentiful than the night before, the majority already globular; certain of the hæmatia enclosed four, six, and even eight piroplasms. The fifth day the hæmoglobinuria was still more intense; but the fever was less accentuated, 4,400,000 hæmatia to the cubic millimetre. On the sixth day the urine became normal, and the animal gradually regained briskness and appetite. At the present it is almost completely cured; there still persists, however, a marked anæmia accentuated by an intense globular destruction.

The existence of this interesting disease has never before been noted in France. A case which seems identical has been observed in Senegal, but it was not experimentally reproduced by the discoverer.

(*Recueil.*)

VAGINISM IN A BITCH CURED BY CUTTING THE NERVUS PUDENDUS.

Professor Parascandolo, of Naples, reports a case of vaginism or hyperæsthesia of the external genitals, which went the length of causing spasmodic contraction of the constrictor vaginæ and of the other muscles of the pelvic region. The animal in question was a powerful bitch of the Danish breed. She had, her owner reported, never been able to submit to copulation even when in heat and evidently desirous of being covered.

At the moment of the immissio penis she would make efforts to escape, utter loud barks, attack the male animal, and rush about as if she were mad, until she fell down suffering from violent spasms or convulsions, which lasted some twenty minutes. Examination revealed no kind of visible morbid phenomena in the genitals. On the other hand, digital examination of the vagina and of the rectum could be performed only when the animal was under the influence of narcotics, because the vagina, when touched, contracted so much that every attempt to introduce the fingers seemed hopeless. If the animal, when narcotised for examination, awakened too soon from unconsciousness she became furious, and would have flown at everybody had she not been firmly fastened to the operating table. On such occasions the vaginal contraction was so violent that the operator's finger was caught as in a vice. An attempt was made at cure by administering tonics to brace the system, but, although this was tried for a year, it did not succeed. Professor Parascandolo then thought it advisable to cut the nervi pudendi, from which, on both sides, a portion 2 centim. long was removed. The wounds were sewed up and healed very rapidly. Four months later the bitch was covered without difficulty, became pregnant, and has been quite healthy ever since.

(*Wochenschr. für Thierheilk.*)

Review.

ANNUAL REPORT of the SANITARY AND MARKETS DEPARTMENTS of the CITY of EDINBURGH for 1900.

WE have read the above Report with much interest, showing as it does how strenuous are the authorities in Edinburgh to provide its inhabitants with good food and clean healthy housing.

Dr. Williamson and his staff have no easy task in the carrying out of their multifarious duties, as the enforcement of most laws for the benefit of the masses is sure to call out cries of injustice and hardship to some, and these cry out very loudly and would make out that the sanitary staff do their duty just to annoy others. Such tasks are more or less thankless, but such should not dishearten the Doctor and his staff; they have our heartiest sympathy and sincerest thanks.

We here quote from portions of the Report, which will give our readers a fair idea of the work being done.

DAIRIES.

The number of dairies on the register is 471, being a decrease of 11 on the number reported last year. Over 2000 visits have been paid during the year, and it may be stated generally that all of the premises have been found in a satisfactory condition.

In two cases, however, a direct communication was found to exist between dwelling-houses and dairy premises, and the proprietors were required to have such a connection permanently closed.

Strict attention is paid to the condition of cleanliness of dairies, and in order to maintain a high standard in this respect, it was found necessary to require 41 shops to be papered and painted, and six others, which were found in a dirty condition, to be at once thoroughly cleansed.

The existing sanitary appliances have been constantly kept under observation, and several renewals and alterations have been found necessary in regard to them.

COW-BYRES.

In this city there are altogether 124 cow-byres, and the number of cows housed in them is slightly over 3000.

It was found that several of these premises were in such a condition as to render them quite unsuitable for continued occupation, and intimation was served upon the occupiers of seven of them, to the effect that their license could not longer be continued.

The visits of the [*veterinary*] inspector are so arranged as to ensure that every byre is visited once a fortnight, and that every cow is carefully examined upon each occasion. In all cases in which any doubt exists as to the healthy condition of an animal, the milk is the same day carefully examined.

The bacteriological laboratory which is established in connection with this department, has been of the greatest service in connection with this branch of the work, and very much work of a useful nature has been performed in it. In this connection, it may be stated that 209 samples of milk taken from cows in which suspicion of disease existed have been examined microscopically and bacteriologically.

As a result of such examination, it has been necessary during the year to order the removal of 36 diseased cows from byre premises. This procedure is carried out under the useful powers contained in the Edinburgh Municipal and Police Act, 1891, section 29.

The diseases from which these animals suffered were :—In 25 cases, tuberculosis ; in 7, septic condition of the udder ; in 2, actinomycosis of the udder ; and in the remaining 2, general pyæmia. In the case of tuberculous cows, 11 were found suffering from tuberculous lesions of the udder, and microscopic examination at once showed the presence of the bacillus in the milk.

It is satisfactory to report, that owing to the fortnightly inspections which are made of the byres, it is perfectly impossible for these conditions to remain undetected for such a time as to imply danger to the citizens. The number of cases of diseased udders, however, clearly proves the absolute necessity of such frequent inspections, and proves also the great danger which would be entailed, were a supervision of less stringent nature exerted.

In addition to the number of diseased animals which were removed and slaughtered, it was found necessary in consequence of temporary illness of 33 other animals, to prevent the sale of their milk until recovery had taken place.

During such period of illness, more frequent visits were paid to the affected animals, and much closer supervision exerted over them.

Structural Alterations.—In connection with a large number of byres it was found that the manure pits were situated in such close proximity to the byre premises as to lead to the manure being stored against the outer wall. This arrangement was so highly unsatisfactory as to require immediate action to be taken in all cases in which it was found to exist, and in connection with 28 byres it was necessary to require the proprietors to construct new manure pits at a safe distance from the occupied byre premises. This in all cases was satisfactorily carried out.

The importance of thoroughly good ventilation has been kept in view,

and improvements in this respect have been effected in thirty cases. Improved lighting has also been introduced in fourteen cases.

Careful attention is paid to the periodic cleansing of the manure pits, as it is found that there is a tendency to allow such to collect until a time convenient for farmers to remove it.

Each byre has been lime-washed twice during the year, and in some cases it has been found necessary to require this to be done more frequently, and over 250 notices have been served in connection with this matter.

Meat Inspection.

The quantity of meat seized and condemned in the city slaughter-houses has, during the year, been rather less than in the year preceding. This has been due to two outstanding circumstances. The first of these has been the small number of cows which have been slaughtered as compared in any previous year. The reason for this is not readily determined; but there can be little doubt that the owners of such animals prefer to send them to slaughter-houses in other districts where the supervision and inspection are of a less stringent nature. As tuberculous disease chiefly affects this class of animal, there must, in consequence, necessarily be some evident diminution shown in the annual returns.

A second factor which must be taken into account in connection with such diminution is also an important one. During the past year the importation of foreign meat has assumed proportions far exceeding those in any previous year.

An idea of the number of these foreign carcases which have been imported may be gathered from the following statement which has just been prepared, viz., 2500 carcases of cattle killed at the port of landing and imported from the United States; 3000 carcases of cattle, and 5000 carcases of pigs (refrigerated), also from the United States; 1000 carcases of calves imported from Holland; 200 carcases of cow-beef imported from Denmark; and 16,000 carcases of sheep (refrigerated) imported from Argentine.

The total number of these importations, amounting as it does to 27,700, very evidently shows a noticeable effect upon the number of animals slaughtered within our own city.

From Table II. it will be observed that 99 carcases were during the year condemned in consequence of tuberculous disease, and Table III. [see p. 54] has been prepared with the view of setting forth the extent of the infiltration of this disease in each animal which was so condemned.

All the provision shops, warehouses, sausage factories, and railway stations have been regularly and systematically visited—over 8000 visits having been paid to them during the year.

A most aggravated case, in which a conviction was obtained, was one in which tuberculous meat was exposed in a butcher's shop in the city. The person who suffered this meat to be exposed was subsequently convicted and fined the maximum penalty of £50.

The fat-stock sales have been regularly attended, and each animal has been carefully examined preparatory to its being exposed for sale.

Twenty-eight seizures of diseased animals have been made in these places during the course of the year, and in several cases prosecutions, followed by heavy fines, have resulted from such seizures. The aggregate fines in connection with this branch of inspection have amounted to £72.

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Much good work, therefore, is being done in preventing such diseased animals from being purchased by butchers. All the prosecutions under this heading, as well as those connected with diseased meat, have been successfully carried through without a single hitch occurring in connection with any of them.

It has not been possible to prosecute in all of these cases, as the section of the Public Health Act under which a seizure is made distinctly stipulates that no conviction can take place if the owner of the animal can prove that he did not know, and could not with reasonable care have known, of its diseased condition.

While it was proved to the satisfaction of the Sheriff in all cases in which a seizure was made that the animals involved were diseased, and while orders to destroy were without exception granted, the inquiries which immediately followed sufficed to prove that in cases in which no procedure was adopted, the owners could not reasonably have been expected to know the condition in which the animal was at the time of exposure for sale.

In the last table will be found some information specially in reference to tuberculous cows. From this it will be seen that 88 such were condemned during the year, being a proportion of slightly over 11 per cent. of those slaughtered. This is rather in excess of the proportion during the past two years, which was 8·2 and 6·4 per cent. respectively. While this number is, at first sight, a large one, it must be remembered that the actual percentage of condemnation for tuberculosis, if the whole bovine species slaughtered are taken into account, amounts to only 0·3 per cent. Of the 88 tuberculous cows, 61 were sent to the slaughter-houses from districts beyond the city boundaries; while 27 were from the city byres. Of the 27, at least 20 had been detected, while suffering from this condition, by the Inspector in his visits, and had, in consequence, been ordered to be slaughtered.

In thirteen cases the udders were found to be diseased, and it is satisfactory to state that only one such case was from a byre in this city, and further, that the condition had been detected by the inspector on the occasion of one of his visits. The other twelve animals which suffered from disease of the udder were all brought from districts outside the city boundaries, but it is noteworthy that in six of these cases the byres from which they were sent supply milk for the use of the citizens here.

This fact seems to emphasise the necessity for increased vigilance in some county districts, or for the city authorities putting in force the powers contained in the Edinburgh Municipal and Police Act, under which it is possible to inspect the cows in all byres, wherever situated, which contribute towards the city's milk supply.

Extract from Table III. showing the extent of Infection in condemned Tuberculous Carcases.

No. of Animals.	Lungs.	Heart and Pericardium.	Pleurae.	Liver.	Spleen.	Bowels.	Peritoneum.	Udder.	Other Organs.	Lymphatic Glands.	Emaciated.
96	96	7	73	46	25	60	48	14	14	76	17

Victoria Veterinary Benevolent Fund.

THE Third Annual General Meeting was held at 10 Red Lion Square, W.C., on Wednesday, 5th June.

There were present about twenty members of the Fund.

Professor M'Fadyean, in the unavoidable absence of Professor Penberthy, the President, was in the chair.

The CHAIRMAN remarked upon the successful year the Society had experienced, and said their financial position was on the whole satisfactory. They had £1150 invested in Consols, and during the past year relief to the extent of £102 had been given. They were able to afford but slight assistance at present, but he hoped, if members would only continue to support the Fund, they would be in a position to afford material help in all genuine cases of distress.

General Sir FREDERICK FITZWYGRAM said he regretted the Society was partly provident and partly philanthropic; it was on this account he had refused to help the funds, but upon being assured by the Chairman that the Society was entirely philanthropic, he said he should be pleased to subscribe two guineas annually.

Messrs. Coleman, Burrell, and Wragg were re-elected Trustees, and Messrs. Woodger and Wartnaby Auditors for the ensuing year.

A vote of thanks to the Chairman terminated the proceedings.

BALANCE-SHEET, MARCH 31ST, 1901.

W. F. BARRETT, Hon. Treasurer, in account with the VICTORIA VETERINARY BENEVOLENT FUND.

RECEIPTS.

	£	s.	d.
Balance in Bank (April 1st, 1900),	132	5	8
Interest on Investments,	22	0	6
Subscriptions,	140	6	6
Life Members,	238	1	9
Donations,	51	10	0
	£584	4	5

Invested in Consols, £900.

PAYMENTS.

	£	s.	d.
Relief,	102	0	0
Printing, &c.	5	2	6
Stamps, Bank Charges, &c.	9	3	9
Consols,	98	15	0
Cheque Books,	0	12	6
Balance at Bank,	366	16	11
,, due to Hon. Sec.	1	13	9
	£584	4	5

Particulars of Relief during year ending 31st March 1901.

	£	s.	d.
Mr. H.	12	0	0
Mrs. D.	14	0	0
Mr. B.	12	0	0
Mrs. R.	12	0	0
Mrs. R.	12	0	0
Mrs. P.	12	0	0
Mrs. B.	12	0	0
Mrs. B.	6	0	0
Mrs. F.	10	0	0
	£102	0	0

We certify that we have examined the above accounts, and in our opinion they are correct.

(Signed) J. WOODGER, G. WARTNABY, *Hon. Auditors.*

ARMY VETERINARY DEPARTMENT

From The London Gazette.

WAR OFFICE, PALL MALL, *May* 29.

Staff.—C.V.S. C. H. Hylton-Jolliffe to be Veterinary-Lieutenant in succession to Vet.-Major G. F. Fenton retired.

IMPERIAL YEOMANRY.

WAR OFFICE, *June* 4.

Royal East Kent (The Duke of Connaught's Own)—F. B. Ditmas, gent., to be Vet.-Lieut.

Oxfordshire (Queen's Own Oxfordshire Hussars)—H. Cleivion Jagger, gent., to be Vet.-Lieut.

C.V.S. Runciman progressing satisfactorily,—May 27, 29, 31. Out of danger, Graaf Reinet,—June 2.

C.V.S. Roberts out of danger,—May 29.

Vet.-Lieut. F. W. Carr was discharged from hospital to duty week ending May 12.

C.V.S. Thomas Hoogan and George Hastings Butcher were discharged from hospital to duty for the week ended May 26.

C.V.S. Otter Barry Skelton was discharged from hospital to duty, week ended May 26.

C.V.S. Butcher, Hingston, Edwards, Hoggan, and M'Lean, left Point Natal, on June 5th, in S.S. "Simla," due at Southampton July 8.

C.V.S. Flanagan and Lynch arrived at Southampton on Friday, June 7, in the "Custodian."

C.V.S. J. C. Young, A. B. Holland, W. J. Arkcoll arrived at Southampton on Saturday afternoon (8th) in the "Mongolian."

C.V.S. White, Gilbert, and Lieut. Southey arrived at Southampton on Sunday, the 9th, in the "Avondale Castle."

Revenue Department.—Veterinary-Major Haggar officiates as Superintendent, Civil Veterinary Department, North-West Provinces, *vice* Major Rings, granted three months' leave.

A number of civil practitioners, who have been serving in the Army Veterinary Department with the Army in the field in South Africa, are to be offered commissions in that establishment, on the recommendation of the Chief Veterinary Officer to Lord Kitchener. Besides these, a number of commissions are to be offered for competition amongst the veterinary schools at home at once.—*The Civil and Military Gazette.*

WAR OFFICE, PALL MALL, *June* 18.

Vet.-Lieut. H. P. Turnbull to Vet.-Captain.

C.V.S. Runciman, relapse, June 10th, Graaf Reinet (dangerously ill, enteric). Slightly improved, June 12; progressing favourably, June 14.

C.V.S. T. Hirst, C. E. Wells, and E. M. D. Dixon left Cape Town for England in the steamship "Victorian" on June 10.

JOHN FREEMAN, F.R.C.V.S., DUBLIN.

Colonel J. Drummond Lambert, C.B., late Director-General Army Veterinary Department, has been granted a Distinguished Service Reward. Colonel Lambert joined the Army October 12, 1857, and most ably discharged the duties of Director-General, 1892-97. He served with the 17th Lancers in the Zulu War, 1879, and was present at the engagement at Ulundi (medal with clasp). He also served in the Boer War, 1881, as Principal Veterinary Surgeon, but as an armistice had then been declared peace eventually resulted.

Obituary.

THE LATE JOHN FREEMAN.

We greatly regret to announce the death of this distinguished Veterinary Surgeon, which took place at Dublin on 6th ult. Mr. Freeman suffered for many months from that most terrible enemy of the human race—cancer. Many a man would have succumbed to the fell disorder long before death appeared with his grim summons, but Freeman was a man of heroic mould, and disdained to yield till he was overpowered. With amazing courage and sublime self-restraint he went about the performance of his daily duties to the very end without a complaint, without a murmur, literally dying at his post, just like the heroic men who within the past year and a half have given up their lives on the South African battlefields for the welfare of their fellow-citizens. Such men, whether soldiers or men of science, are not easily replaced, but they leave a glorious memory, and serve as patterns for the younger generation who are striving after a high ideal of manly courage and integrity.

We append a note of some of the events in the life of Mr. Freeman and some of the honours attained by him :—

Qualified at Glasgow April 1881.
During College course he got four Gold Medals (Materia Medica, Anatomy, Pathology, and Practical Examination of Cattle and Sheep).
Appointed Veterinary Inspector to the Rathdown Union, County Dublin, in May 1881, which he held until his death.
Got his Fellowship Diploma in July 1886.
Was Examiner R.C.V.S. twice.
Governor R.C.V.S., Ireland.
Vice-President, Veterinary Section, Public Health Congress, Dublin, 1899.
President Central Veterinary Medical Association, Ireland, 1899-1900.
Vice-President National Veterinary Medical Association, Dublin, 1900.
Vice-President Veterinary Medical Association, Ireland, 1900.

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CONTAGIOUS DISEASES ANIMALS ACTS, 1864 AND 1890.

SUMMARY OF RETURNS OF OUTBREAKS for the Four Weeks ending 15th June 1901.

ENGLAND AND WALES.

Swine Fever.	Anthrax.	Glanders (including Farcy).	Sheep-Scab (for month of May).
Outbreaks 459 Slaughtered 2228	Outbreaks 31 Attacked 37	Outbreaks 96 Attacked 159	Outbreaks 36
SCOTLAND.			
Outbreaks 5 Slaughtered 53	Outbreaks 23 Attacked 32	Outbreaks 4 Attacked 15	Outbreaks 2
IRELAND.			
Outbreaks 21 Slaughtered 281	Outbreaks 1 Attacked 2	Outbreaks 1 Attacked 1	Outbreaks 24

Communications, Books, Journals, &c., Received.

Agricultural Journal (Cape of Good Hope); Berliner Thierärztliche Wochenschrift; La Clinica Veterinaria (Milan); Deutsche Thierärztliche Wochenschrift; Tannoform in Veterinary Medicine (March); The Sanitary Journal; Scottish Medical and Surgical Journal; Veterinary Record; La Riforma Veterinaria; Le Mois Scientifique (Paris); L'Echo Vétérinaire (Liège); Annales de Médecine Vétérinaire (Brussels); Johns Hopkins Hospital Reports; Journal of Comparative Medicine and Veterinary Archives; Recueil de Médecine Vétérinaire; Gazette Médicale de Paris; Modern Medicine; Johns Hopkins Hospital Bulletin; Il Veterinario di Campagna (Moncalieri); Le Bulletin Vétérinaire (Orleans); Revista de Medicina Veterinaria (Bucarist); La Revista Veterinaria (Buenos Aires); Zeitschrift für Fleisch-und Milchhygiene (Berlin).

Owing to great pressure, we are unable to publish several important contributions.